FIRST CONFERENCE OF TRAINING COLLEGES IN INDIA

OFFICIAL REPORT OF PROCEEDINGS

BARODA
November 1950

FIRST CONFERENCE OF TRAINING COLLEGES IN INDIA

Held under the Joint Auspices of

MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

and

THE INDIAN INSTITUTE OF EDUCATION, BOMBAY

Official Report of the

PROCEEDINGS

(BARODA, 23rd, 24th and 25th November 1950)

MESTON TRAINING COLLEGE
1964
MADRAS

INDIAN INSTITUTE OF EDUCATION
11 Elphinstone Circle, Fort
BOMBAY

THE INDIAN INSTITUTE OF EDUCATION
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MESTON TRAINING COLLEGE
MADRAS

OFFICE-BEARERS OF THE CONFERENCE

President :

Shrimati HANSA MEHTA

Vice-Chancellor, Maharaja Sayajirao University of Baroda.

Conveners :

Shri T. K. N. MENON

Dean, Faculty of Education and Psychology,

Maharaja Sayajirao University of Baroda

Shri M. T. VYAS

Chairman, Indian Institute of Education, Bombay

Local Secretary :

Shri S. N. MUKHERJI

Reader, Maharaja Sayajirao University of Baroda

Organising Secretary :

Shrimati MADHURI R. SHAH

Registrar, The Indian Institute of Education, Bombay

LIST OF DELEGATES WHO ATTENDED THE CONFERENCE

President:

Shrimati HANSA MEHTA

Vice-Chancellor, Maharaja Sayajirao University of Baroda.

INSTITUTIONS	DELEGATES
Bengal	
1. University of Calcutta, Calcutta.	1. Shri J. M. Sen, Head of the Department of Education
Bihar	
2. Government Training College, Patna	2. Principal A. A. Kazimi
Bombay	
3. Chhatrapati Shivaji College, Satara	3. Shri T. B. Awale 4. Shri S. K. Unune
4. Graduates' Basic Training Centre, Ahmedabad	5. Principal J. K. Shukla
Graduates' Basic Training Centre, Dharwar	6. Principal K. B. Teregaonkar
6. Maharaja Sayajirao University of Baroda, Baroda	7. Principal T. K. N. Menon 8. Shri S. N. Mukerjee
7. S. M. T. T. College, Kolhapur	9. Principal S. R. Bhat
8. Secondary Training College, Belgaum	10. Principal D. V. Chikarmane
9. Secondary Training College, Bombay	11. Principal A. B. H. J. Rustomjee
10. Tilak College of Education, Poona	12. Principal B. V Bapat
11. The Indian Institute of Education, Bombay	13. Shri M. T. Vyas 14. Shri R. V. Parulekar 15. Dr. V. V. Kamat 16. Shri J. P. Naik 17. Smt. M. R. Shah
Delhi	
12. Central Institute of Education, Delhi	18. Principal A. N. Basu
Hyderabad	
13. Training College, Osmania University	19. Shri K. Vedanthachary

Institutions	Delegates
Madhya Pradesh	
14. Prantiya Shikshana Mahavidyalaya, Jabalpur	20. Principal L. P. D'Souza
15. University Training College, Nagpur	21. Principal M. Varma
Madras	
16. Teachers' College, Saidapet, Madras	22. Principal M. D. Paul
17. Government Training College, Rajahmundry	23. Principal K. Satyanarayan
18. St. Christopher's Training College, Vepery, Madras	24. Principal K. N. Brokway
19. Andhra Christian College, Guntur	25. Dr. Fredric B. Irvin
Mysore	
20. Teachers' College, Mysore	26. Shri A. C. Deve Gowda
Punjab	
21. Government Training College for Teachers, Jullunder	27. Principal C. L. Kapur
Rajasthan	
22. Govindram Sakseria Vidyabhavan Training College, Udaipur	28. Shri P. L. Shrimali
Uttar Pradesh	
23. Women's Training College, Agra	29. Principal Smt. S. P. Sukhia 30. Smt. A. P. Sherry
24. Muslim University Training College, Aligarh	31. Principal H. Rahman
25. University of Allahabad	32. Dr. P. S. Naidu Head of the Department of Education
26. University of Lucknow, Department of Philosophy and Education	33. Shri B. C. Asthana
27. *Individual Educationists* invited to the Conference	34. Shri H. Bhat 35. Smt. S. Panandikar 36. Shri B. A. Olkar 37. Shri F. S. Chothia 38. Smt. N. Samarth 39. Shri C. C. Shah 40. Shri V. R. Mudholkar

PART ONE

PROCEEDINGS

MESTON TRAINING COLLEGE
MADRAS

FIRST CONFERENCE OF TRAINING COLLEGES IN INDIA

PROGRAMME AND AGENDA

The Conference will be held at Baroda on 23rd, 24th, and 25th of November. The revised programme of the Conference is given below.

Thursday, 23rd November 1950

9-0 a.m. to 10-30 a.m. — **Inaugural Session of the Conference**

It is proposed to invite a large number of local educationists, prominent officials and citizens to attend this Session of the Conference. The programme will consist of the following three items only :—

(1) Welcome Speech by Shri *T. K. N. Menon*, Principal, S.T. College, Baroda.

(2) Inauguration of the Conference and Presidential Address by Shrimati *Hansa Mehta*, Vice-Chancellor, M.S. University, Baroda.

(3) Thanksgiving by Shri *R. V Parulekar*, Director, Indian Institute of Education, Bombay.

10-30 a.m. to 11-30 a.m. — Visit to the Exhibition of Educational Books

2-0 p.m. to 5-30 p.m. — **General Session of the Conference**

The discussions of the Conference will begin with this Session. The various items on the agenda will be taken up in the order given below :—

1. Review of the Training Colleges in India

The discussion on the subject will be initiated by Shrimati *Madhuri R. Shah* who will explain (*a*) the position regarding the colleges that have already supplied the necessary data and (*b*) the steps that are necessary to be taken to collect the data regarding the other colleges.

The subject would then be thrown open to discussion and those delegates who desire to speak may offer comments on the following (or similar) points :—

(*a*) Whether they would be able to get the data from any colleges ? If so, which ?

(*b*) Any suggestions that they may have to make regarding the manner in which the data regarding training colleges should be compiled.

(*c*) Distribution of the training colleges in the different parts of India.

(*d*) Adequacy of the existing provision regarding training of teachers.

(*e*) If it is inadequate, the manner in which the inadequacy can be made up.

(*f*) The common difficulties of training colleges; and the measures which have to be adopted to overcome them.

Shrimati Madhuri R. Shah will work as the Secretary to this section. She will record the proceedings which, on approval by the President, would be presented to the Conference for adoption in the Closing Session.

2. Problems Connected with the Organisation and Administration of Training Colleges in India

The discussion on this subject will be initiated by Shri *H. Rahman* who will read a paper on the subject.

The subject would then be thrown open to discussion and those delegates who desire to speak may offer comments on the following (or similar) points :—

(a) *Admission of students* :

Do we get sufficient number of applicants for admission ? If not, why ?

Do we get the right type of individuals ? If not, what measures should be adopted to get them ?

What standards should be prescribed for admission to training institutions ?

The desirability and practicability of using aptitude and temperamental tests while selecting students for admission.

(b) *Provision of stipends, free-studentships, etc.* :

Can any general principles regarding the levy of fees in training institutions be laid down ? If so, what would they be ?

To what extent and in what manner should financial assistance be provided to teachers under training (stipends, free-studentships, deputation allowances, etc.) ?

(c) *Size of the Training Institutions* :

What would be the minimum, the optimum, and the maximum number of students that a training college should be permitted to enroll ?

(d) *Qualifications for members of the staff of training colleges* :

What should be the qualifications of the members of the staff of training colleges ?

What restrictions regarding teaching experience would you impose ? (*Vide* the observations of the Indian Universities Commission.)

(e) *Salaries of the members of the staff of training colleges.*

(f) *Grants-in-aid to private training institutions* :

What are the existing rules regarding grants-in-aid to private training colleges ?

What difficulties do they create in actual working, and what reforms would you propose to overcome them ?

(g) *Extra-curricular activities in training colleges.*

(h) *Contacts and co-ordination* :

What measures should be adopted or machinery set up in order to bring about a better co-ordination between

(1) the training colleges and the high schools for whom they train teachers; and

(2) the training colleges and other institutions connected with the training and welfare of the teachers.

(3) What measures should be adopted to keep a training college in close touch with its alumni ?

(i) *On what lines should the activities of the training colleges be expanded* ?

Shri S. A. Rauf will act as the secretary to this section. He will record the proceedings which, on approval by the President, would be presented to the Conference for adoption in the Closing Session.

3. Organisation of an Indian Council of Teacher Education

(The Conference will elect a secretary to this section.)

The discussion on the subject would be initiated by Shri *A. N. Basu*, the Chairman of the Special Committee that is proposed to be set up for the purpose. The subject would then be thrown open to discussion and the delegates who desire to speak may offer their comments on the following (or similar) points:—

(*a*) The desirability of establishing such a Council;

(*b*) any suggestions they have to make regarding the draft constitution which has already been circulated; and

(*c*) steps to be taken to secure recognition to the Council from the Central and State Governments and the Indian Universities.

It has been suggested that the Conference should adopt the constitution of the Council and should also elect the first Executive Committee at this very session so that the Executive Committee can hold its meeting on the afternoon of Sunday the 26th and start work in right earnest. The delegates are especially requested to state their views on this point.

At the end of the general discussion and (assuming, of course, that the establishment of such a Council is agreed to

by the Conference) the President will propose that the matter be referred to a Special Committee consisting of—

(1) Shri A. N. Basu, Chairman;

(2) The Secretary; and

(3) Such other members as may express their willingness to work on the Committee.

The secretary to this section will record the proceedings and present them to the Special Committee. The Committee will prepare a final constitution for the Council and present it to the Conference for adoption in the Closing Session.

4. Planning, Promotion, Co-ordination, and Publication of Educational Research in India

(The Conference will elect a Secretary to this Section.)

The discussion on this subject would be initiated by the address of Dr. *P. S. Naidu*, the Chairman of the Section. At the end of his address, the subject would be thrown open to discussion and those delegates who desire to speak may offer their comments on the following (or similar) points:—

(*a*) Review of the educational research done so far in India with special reference to the agencies engaged in it; its adequacy and standard; and the general shortcomings in the situation that call for early action;

(*b*) Measures required to plan, co-ordinate, and develop the educational research that is being carried on at present;

(*c*) Listing of problems for educational research with some indications of their priority;

(*d*) The manner in which the training colleges can help the cause of educational research; and

(*d*) Measures to be adopted for the publication of educational research in India.

At the end of the discussion, the detailed consideration of the subject would be referred to a Special Committee which will consist of—

(1) Dr. P. S. Naidu, Chairman ;
(2) The Secretary ; and
(3) Such other members as may express their willingness to serve on the Committee.

The Committee will draw up a brief report or a set of resolutions on the issues raised and present them to the Conference for adoption in the Closing Session.

Friday, 24th November 1950

9-0 a.m. to 12-30 a.m. — **General Session of the Conference** (*continued*)

The discussions of the Conference would be continued on the second day and the following items would be taken up in the Morning Session :—

5(a) M.Ed. Course

(The Conference will elect a Secretary to this Section.)

The discussion of this subject will be initiated by Shri *L. P. D'Souza,* the Chairman of the Committee which is proposed to be set up for the purpose. After his paper is read, the subject will be thrown open for discussion.

The M.Ed. courses of all Indian universities have already been circulated and the points that arise from them have also been indicated (*vide* pp. 49-138 of the Conference papers). The delegates will offer comments on these or similar other points relevant to the subject.

At the end of the discussion, the subject will be referred to a Special Committee which will consist of—

(1) Shri L. P. D'Souza, Chairman ;
(2) The Secretary ; and
(3) Such other members as may express their willingness to be on the Committee.

The Secretary will record all the proceedings in this section and present them to the Committee which will draft a set of

resolutions or a brief report on the several issues raised and submit it to the Conference for adoption in the Closing Session.

5(b) B.T. Course

(The Conference will elect a Secretary to this section.)

The discussion on this subject will be initiated by Shrimati *Amy B. H. J. Rustomjee* who will read a paper on the subject.

The B.T. (or B.Ed.; Dip.Ed., or L.T.) courses of universities have already been circulated and the points for discussion that arise from their comparative study have also been indicated (*vide* pp. 155-248 of the Conference papers). The delegates will comment on these or similar other points arising from the subject.

At the end of the discussion, the subject would be referred to a special committee consisting of—

(1) Shrimati Amy B. H. J. Rustomjee, Chairman;

(2) The Secretary; and

(3) Such other members as may express their willingness to serve on the Committee.

The Secretary will record the proceedings in this section and present them to the Committee which will prepare a brief report or a set of resolutions on the issues raised and present it to the Conference for adoption at the Closing Session.

5(c) Undergraduate Teacher-training courses

(The Conference will elect a secretary to this section.)

The discussion on this subject will be initiated by Shri *Mir Ahmed Ali Khan*, the Chairman of the Committee that is proposed to be set up for the purpose. After his paper is read, the subject will be thrown open to discussion.

Those delegates who desire to speak may offer comments on the following (or similar) points:—

(1) The existing provision for the training of undergraduate teachers in their part of the country; its merits and demerits; and the reforms needed.

(2) Whether undergraduate teacher-training should be done by the University or by the Department or by both ?

If by both, the measures of co-ordination necessary.

(3) What should be the broad outline of a teacher-training course for undergraduates ?

What reforms would you suggest in the existing training courses for undergraduates ?

(4) The medium of instruction and examination at the undergraduate level ;

(5) Problems regarding the organisation and administration of training institutions for undergraduates (on the same lines as indicated in item No. 2) ; and

(6) Problems connected with the training of undergraduate teachers [on the same lines as those indicated for graduate teachers under item 5(b) above].

At the end of the discussion, the problem would be referred to a Special Committee consisting of—

(1) Shri Ahmed Ali Khan, Chairman ;

(2) The Secretary ; and

(3) Such other members as may express their willingness to work on the Committee.

The secretary will record the proceedings of this section and present them to the Committee which will prepare a brief report or a set of resolutions on the issues raised and present it to the Conference for adoption in the Closing Session.

6. New Courses

(The Conference will elect a secretary to this section.)

The discussion on this subject will be initiated by Shrimati *Madhuri R. Shah*, who will read a paper on the subject.

After her paper is read, the subject will be thrown open to discussion and the delegates may offer comments on the following (or similar) points :—

(*a*) What types of new courses would be required to train all the different types of personnel required for educational reconstruction in India ? and

(*b*) What measures should be adopted to provide these courses ?

The secretary will record the proceedings and, on approval by the President, present them to the Conference for adoption in the Closing Session.

7. The Observations of the Radhakrishnan Commission

These have already been circulated (*vide* pp. 145-154 of the Conference papers). The points made out in these observations would be taken into consideration by the various committees or sections concerned. For instance, the observations regarding the M.Ed. course would be considered by the M.Ed. committee, those regarding the B.T. course by the B.T. committee and so on.

The delegates may offer any general comments which they may have to make and which were not covered by earlier discussions.

8. The Problem of the Medium of Instruction

(The Conference will elect a secretary to this section.)

The delegates would be requested to state their views on the subject of the medium of instruction and examination at the different levels of teacher-training ; the manner in which and the time in which a change-over (if deemed necessary) from English to the national language or the mother-tongue should be brought about.

The secretary will record the proceedings of the section which, on approval by the President, shall be presented to the Conference for adoption in the Closing Session.

9. The Problem of Terminology in Education

(The Conference will elect a secretary to this section.)

The discussion on the subject will be initiated by Shri *S. R. Bhat*, the Chairman of the section. After Shri Bhat's paper is read, the subject will be thrown open for discussion.

It is proposed to set up a Committee, under the auspices of the Conference (or the proposed All-India Council of Teacher-Education) to prepare a uniform and scientific terminology for educational purposes (including psychology). The delegates are requested to express their views on the desirability of setting up such a Committee and the general principles on which it should prepare its report. If the establishment of the Committee is agreed to, the Conference will proceed to elect the Committee at the close of the discussion.

The secretary will record the proceedings in this section and present them, on approval by the President, to the Conference for adoption in the Closing Session.

10. Educational Journals

(The Conference should elect a secretary to this section.)

The discussion on the subject would be initiated by Shri *M. Varma*, the Chairman of the Section. After Shri Varma's paper is read, the delegates who desire to speak may offer their comments on the following (or similar) points : —

(1) Measures necessary to improve the existing educational journals ;

(2) New specialised journals that are needed ; and

(3) The manner in which the training colleges may help the development of educational journalism in India.

The secretary to the section will record the proceedings and, on approval by the President, present them to the Conference for adoption in the Closing Session.

11. Production of Educational Literature

(The Conference will elect a secretary to this section.)

The discussion on the subject will be initiated by Shri *H. Rahman*, the Chairman of the Section. After Shri Rahman's paper is read, the subject will be thrown open to

discussion and the delegates who desire to speak may offer their comments on the following (or similar) points :—

(*a*) The type of educational literature needed for educational reconstruction in India ;

(*b*) The manner in which the training colleges may help in producing it ; and

(*c*) The manner of its publication.

The Secretary will record the proceedings and, on approval by the President, shall present them to the Conference for adoption in the Closing Session.

12. Co-ordination of Library Facilities

A note on the subject prepared by Shrimati *Madhuri R. Shah* is separately circulated. The delegates may speak on the issues arising from this note.

Shrimati Madhuri R. Shah will record the proceedings in this section and, on approval by the President, present them to the Conference for adoption in the Closing Session.

13. Psychological Tests

(The Conference will elect a secretary to this section.)

The discussion on the subject will be initiated by Shri *M. D. Paul* who will read a paper on the subject. After Shri Paul's paper is read, the subject would be thrown open for discussion. The delegates who desire to speak may offer comments on—

(*a*) The role of training colleges in the preparation and standardisation of psychological tests in Indian languages ; and

(*b*) Methods necessary to be adopted for the popularisation of psychological tests.

At the end of the discussion, the subject would be referred to a special committee consisting of—

(1) Shri M. D. Paul, Chairman ;

(2) The Secretary ; and

(3) Such other members as may express their willingness to work on the Committee.

The Committee will draft a brief report or a set of resolutions and present them to the Conference for adoption in its Closing Session.

14. Educational and Vocational Guidance

The discussion on the subject will be initiated by Shri *F. S. Chothia*, the Chairman of the Section. He will read a paper on " The Role of the Training Colleges in Developing a Guidance Service in Schools ".

After Shri Chothia's paper is read, the subject will be thrown open to discussion.

Shri F. S. Chothia will record the proceedings in this section and, on approval by the President, present them to the Conference for adoption in its Closing Session.

Saturday, 25th November 1950

2-30 p.m. to 5-30 p.m.	**Closing Session of the Conference**

The afternoon of Friday and the morning of Saturday would be devoted to the work of the Committees and the Closing Session of the Conference will begin at 2-30 p.m. on Saturday, the 25th of November 1950. The following business will be transacted :—

15. Training of Teachers and Research in Basic Education

(The Conference will elect a secretary to this section.)

The discussion on this subject will be initiated by Shrimati *S. Panandikar*, the Chairman of the Section.

After the speech of Shrimati S. Panandikar, the subject will be thrown open to discussion and the delegates who desire to speak may offer comments on the issues arising out of the subject.

The secretary will record the proceedings in this section which, on approval by the President, will be presented to the Conference for adoption in its Closing Session.

16. Area Training Schemes

(The Conference will elect a secretary to this section.)

The discussion on the subject will be initiated by Shri *M. T. Vyas.* After Shri Vyas's paper is read, the subject will be thrown open to discussion.

The Secretary will record the proceedings in this Section and, on approval by the President present them to the Conference for adoption in its Closing Session.

17. The Time and Venue of the next Conference

Suggestions from the delegates will be invited. The Conference will decide three places in order of priority.

18. The Publication of the Proceedings of the Conference

A note prepared by Shrimati *Madhuri R. Shah* regarding the present proposals for the publication of the proceedings of the Conference is separately circulated. Suggestions on the subject will be invited from the delegates.

19. Other subjects

The President may allow the inclusion of any subject in the agenda at any time. If any such subjects are included, they will be discussed at this point.

20. Presentation and Adoption of the Reports of the Committees or Sections

The reports will be presented by the secretaries in the following order :—

(1) Review of Training Colleges in India.

(2) Problems connected with the organisation and administration of the training colleges.

(3) Organisation of an Indian Council of Teacher-Education.

(4) Planning, promotion, co-ordination and publication of educational research in India.

(5) (a) M.Ed. Course.

(b) B.T. Course.

(c) Training courses for undergraduate teachers.

(6) New Courses.

(7) Medium of Instruction.

(8) Educational Terminology.

(9) Educational Journals.

(10) Production of Educational Literature.

(11) Co-ordination of Library Facilities.

(12) Psychological Tests.

(13) Educational and Vocational Guidance.

(14) Training of Teachers and research in Basic Education.

(15) Area Training Scheme.

(16) Reports on other subjects, if any.

21. Thanksgiving

First Conference of Training Colleges in India

INAUGURAL SESSION

Thursday, 23rd November 1950

(9 a.m. to 10-30 a.m.)

The Inaugural Session of the First Conference of Training Colleges in India was held at Baroda on Thursday, 23rd November 1950, at 9 a.m. in the Lecture Hall of the Secondary Teachers' College, Baroda. It was attended by a distinguished gathering which included, besides the delegates, the officials of the M.S. University of Baroda, and local educationists and public leaders.

After the Welcome Song which opened the session, Shrimati Madhuri R. Shah read the messages received for the Conference.

Message from Shri K. M. Munshi, Ministry of Food and Supplies, New Delhi

" The Hon'ble Shri K. M. Munshi is thankful to the Faculty of Education and Psychology, Maharaja Sayajirao University of Baroda for their kind invitation to the Inauguration of the First All-India Conference of Training Colleges on Thursday the 23rd November 1950. He regrets his inability to attend the function but wishes the same every success."

Message from the Honourable Shri B. G. Kher, Chief Minister, Bombay State

" In view of the pressing need for educating the large masses of illiterate people in our country the importance of having an adequate number of properly trained teachers is

Seventeen

great. I am, therefore, glad to know that under the auspices of the Baroda University and the Indian Institute of Education of Bombay a Conference of Training Colleges is being held at Baroda to discuss the various problems connected with the training of teachers. In addition to the other problems you will be considering I would like your Conference to consider also how we can attract more women to the teaching profession, specially in the early stages of education. Teaching like any other occupation, even more so, requires efficient training and I wish the Conference all success."

Message from the Honourable Shri Omeo Kumar Das, Education Minister, Assam State

"I am glad to note that you have taken up useful subjects for discussion in the Conference. It is important and as well as urgent that we should evolve a national policy of mass education. In spite of our efforts we have not yet been able to chalk out a right path. We have been the legatee of an educational system which has failed in crucial requirements. The literary bias of the present arrangements has led to mass production in misfits in life. I feel we are still groping in the dark. The welfare of the mass people both rural and urban depends on the educational approach. I hope this Conference will help the Country and the Nation in the solution of many problems connected with Education."

Message from the Honourable T. Siddalingaiya, Education Minister, Mysore State

"I am delighted to learn that the Maharaja Sayajirao University at Baroda and the Indian Institute of Education at Bombay are together convening a Conference of all the Indian Training Colleges.

This Conference is the first of its kind in India, and from the viewpoint of the recent dawn of our Independence, it comes not a day too soon. We have long felt the need for reconstruction of almost every branch of our national activity, but nothing can be so urgent as the reorganization of our educa-

tional set-up, in perfect harmony with our individuality, our actual needs and our own national genius.

India today desperately looks round for men of nerve and grit, for unbending patriots who are wide-awake to the responsibilities of leadership. But equally does she need men of vision and vigour of unswerving faith and a resolute will to follow. To prepare, therefore, men and women of the requisite type is the most urgent task that awaits our teachers today.

I wish that the labours of this Conference be blessed with unqualified success and that the delegates to the Conference will feel so much the richer for participating in its deliberations and return to their Colleges the better equipped for discharging their unique mission of building up the nation at this crucial stage of our history."

Message from the Honourable Shri Narotam Singh, Education Minister, Punjab State

" I am glad to know that under the joint auspices of the Universities, a Conference is being held to discuss issues connected with teacher education under the energetic and inspiring leadership of Shrimati Hansa Mehta, the Vice-Chancellor.

The sober reasoned conclusions of group of members, who have experience in and knowledge of the subject under discussion, will benefit those present at the Conference and others that are not in attendance.

I wish this Conference all success."

Message from the Honourable Shri Prem Narain Mathur, Minister for Home and Education, Government of Rajasthan

" The building up of a new India in a new world partly depends upon the type of men and women our educational structure produces. Hence the great importance of education. The corner-stone of all educational development is the teacher himself. I hope that this Conference which is the first of its kind in our country will give full and mature thought to the problems of education particularly those dealing with the

teachers themselves. The Rajasthan Government in its own humble way has given necessary thought to this question of producing right type of teachers and have started a 'New Teachers' movement in the State. Let us hope that this Conference will prove of great help to all such attempts made throughout the country. I wish the Conference a real success."

Message from Shri G. B. Kotak, Minister for Education, Saurashtra

" I am glad to hear that a first conference of training colleges in India, under the joint auspices of the Maharaja Sayajirao University of Baroda and the Indian Institute of Education of Bombay, is meeting at Baroda in the fourth week of November 1950.

The need for holding such a conference was felt ever long before, but it has materialised now for which the organisers deserve congratulations.

It is a fact that there is a great dearth of trained teachers in this country and as such training colleges have a great mission to fulfil. Future of the next generation entirely rests upon the nature of training imparted to our teaching brethren, more particularly, at a juncture when our country has just emerged from the shackles of serfdom.

I wish the conference a great success."

Message from Lt.-Col. C. V. Mahajan, Vice-Chancellor, University of Agra

" I am glad to know that for the first time a Conference of Training Colleges in India is being held at Baroda. I congratulate the organisers and wish the Conference all success."

Message from Shri D. R. Bhattacharya, Vice-Chancellor, University of Allahabad

" The plans and problems that are going to be tackled and deliberated upon will I am sure bring forth the desired effect which may help turning out a steady stream of well-equipped teachers and servants of humanity. I convey my best wishes and warm greetings for the success of the Conference."

Message from Shri S. N. Sen, Vice-Chancellor, University of Delhi

" I wish the Conference every success. India needs thousands of trained teachers for fighting the prevailing ignorance and illiteracy. The training colleges have to face the problem of training the maximum number of teachers in the minimum time."

Message from Shri Narendra Deva, Vice-Chancellor, University of Lucknow

" Education has to be adjusted to suit the needs of the Indian Society. Our educational programme should be in consonance with the spirit of the age and should lay emphasis on those social and moral values which constitute the foundation of the world-culture. Amongst other things our system of education should inculcate amongst students a democratic spirit.

Much would, therefore, depend on the quality of our teachers. From this point of view a proper vocational training becomes of paramount importance. The teacher should be well equipped for the task that he is called upon to perform. A teacher's status should be raised in society so that he may command the respect which is due to him. An appeal should also be addressed to the teacher to play his role in free India.

I hope the Conference will consider all questions relating to the training of the teacher and the raising of his status.

I wish the Conference every success."

Message from Shri B. L. Manjunath, Vice-Chancellor, University of Mysore

" I am very happy that the First All-India Conference of Teachers' Training Colleges will be held at Baroda under the Presidentship of Srimati Hansa Mehta, Vice-Chancellor, M.S. University of Baroda on the 23rd, 24th and 25th November 1950. In the Free India of today the vital importance of proper and co-ordinated teacher-training needs no emphasis. The efficiency of the entire educational system depends upon the teacher, his ability, his character and his training. I am

confident that your deliberations will be of the greatest significance to the future of education in India and that the Conference will point out the lines on which the reorganisation of teacher's education in India should proceed."

Message from Shri Dubey, Vice-Chancellor, University of Nagpur (by wire)

"CONVEY BEST WISHES SUCCESS CONFERENCE TRAINING COLLEGES STOP HOPE CONFERENCE GIVES AUTHORITATIVE AND OBJECTIVE STATEMENT OF PLACE TRAINING COLLEGES IN NEW INDIA."

Message from Shri R. P. Tripathi, Vice-Chancellor, University of Saugar

"I am very glad to know that the teachers of training colleges in India are meeting to discuss the problem of making education modern and effective. I hope the deliberations will be fruitful and prove immensely useful to the country at this juncture. I extend my heartiest greetings and goodwill to the Conference. I hope it will prove an eminent success."

Message from Shri K. G. Saiyidain, Educational Adviser to the Government of Bombay

"I regret very much that circumstances make it impossible for me to attend this conference. I regard it as a specially important conference and am greatly interested in its success not only because my first sphere of work was the Training College—for which I have always retained a soft corner in my thoughts—but also because I strongly hold that, in any effective scheme of educational reconstruction, Training Colleges must play a central part. Unless they assume the position of dynamic leadership secondary education cannot be improved which means also that primary education is doomed to be ineffective and futile, because it draws (or should draw) its teaching personnel mainly from the Secondary Schools. So all the plans of educational development in which we are interested, depend—in the ultimate analysis, at least in a larger measure—on whether or not our Training Colleges are func-

tioning in an adequate manner and providing for our teachers what may be called '*abundant* education'—abundant in the sense in which Christ spoke of 'abundant life' that is, rich, meaningful, human wedded to the stars!

I hope the time is now definitely gone—and this conference will finally close the chapter—when the Training College syllabus centred, in theory, round dreary items like 'presentative and representative elements of consciousness' in methodology round 'maxims of methodical procedure' and the whole study of the vibrant subject of education had about as much freshness as pickled onions. Methods of work and discipline were often so mechanical, stereotyped and hidebound that, by the time the average teacher came out of a Training College, all freshness and enthusiasm was beaten out of him and he had no living awareness of the relationship between Education and life. If there is one truth which has become clearer and more deeply etched on my mind with the passage of the years it is the fact of the intimate interconnection between the problems of education and the dynamic problems of life from which they stem and derive their special colour and texture. Any teacher who passes out of the University and the Training College without having this awareness quickened and without acquiring an interest in his socio-economic as well as ideological environment, can never become an educator in the real sense of the word. I hope you will duly and critically consider how far our present syllabuses respond to the challenge of this situation and courageously resolve to drop overboard whatever is merely traditional without being enlightening or life-giving. You should also, I suggest, examine whether the whole set-up of our Training Colleges embodies the principles and ideals of progressive education which we advocate in theory. If we expect our schools to educate children in an atmosphere of freedom, co-operative work, self-discipline and community living, we cannot very well staff them with teachers to whom these concepts are mere *academic* concepts, as expressed in the words of their text books! No, the Training Colleges must themselves be transformed into genuine communities where teachers can live and learn and work as a free, democratic and

responsible group of real persons, engaged in a significant activity.

I would also like to reinforce the appeal which this conference is likely to make for the better and more intelligently planned organisation of educational research both as a part of their higher degree and as a normal activity of the Training College Staff. Education in India is still, in the main, virgin soil for research ; in all its fields and branches we have been relying on rule-of-thumb procedures and, even where new and progressive methods have been employed, they are usually borrowed from western experiments. Now, you can borrow in Science and Technology without much difficulty but in the social and philosophical studies this is much more difficult and risky. In this field a nation must pass through its own travail of creative thinking and experience, intelligently related to its own peculiar social and psychological circumstances. It is, therefore, the business of our Training Colleges to assume the role of educational leadership and to carry on research and experimental field work in order to explore unresolved problems and improve the quality and technique of school education.

I should like to link up with this plea another consideration which we must all bear in mind. It is not possible and it cannot be reasonably expected that all (or even a majority) of our Training College professors will be able to carry on original research. Research requires certain mental and temperamental qualifications which even all highly educated and intelligent persons do not possess. But there is no reason why *all* Training Colleges and their professors should not act as intermediary agencies between research workers and schools and interpret, in concrete terms, the bearings of research on everyday school problems. A good deal of the research that goes on, not only in India but elsewhere, remains infructuous because it is not brought into the school-room, and tested on the touchstone of practice and because it does not illuminate that practice. If our newly stimulated research remains confined to the pages of the journals and the school practice is not influenced and irradiated by it and the teachers in general have no appreciation of its bearing on their every-

day work, it will be worse than useless. It is here, in this task of wedding research fruitfully to educational practice, that all Training Colleges and everyone of their professors can play a most useful part and I hope this Conference will give a lead in this direction.

I wish the Conference all success in a more realistic sense than is given to many other Conferences which devote themselves largely to the making of speeches and passing of resolutions which are supposed to be implemented by some *other* agencies. You will, I hope, resolve upon proposals and measures which you will be largely in a position to implement yourselves."

Welcome Speech

Shri *T. K. N. Menon*, the Dean of the Faculty of Education and Psychology then delivered the welcome speech. He said :

"This indeed is an auspicious day for the University of Baroda. We have here with us the Principals of Training Colleges and Heads of Training Departments of Universities who are in charge of training of teachers of secondary schools in India. We have also a galaxy of eminent educationists who have graced this occasion with their presence. This is the first time—paradoxically enough the first time—when those engaged in teacher education on the university level are meeting in conference to discuss their problems. On behalf of the Maharaja Sayajirao University of Baroda and of the institution of which I am the Head, I offer you all a very sincere and cordial welcome.

It is my good fortune to be the Head of the Faculty of Education and Psychology on the occasion of this first and important Conference of Training Colleges in India and therefore my happy privilege to welcome you all. These are privileges which I did not anticipate when I joined the staff of the Baroda Teachers' Training College as Professor of Education when the College was started fifteen years ago. This College was allowed to grow and progress because of the sympathy and support of the former Government of Baroda and at present of the Maharaja Sayajirao University. When

it was founded in 1935, it had the modest objective of training the teachers of secondary schools in the Baroda State. Its first Principal, the late Gurubandhu Bhattacharya whose name ought to be written in letters of gold in the history of the institution laid its foundations very firm and organised it thoroughly during the brief period of one year when he was with us. He did not spare himself in this work, and when he died at the end of the first year of his service, Baroda realised that his premature demise was caused by the hard and strenuous work which he put in in organising the College. Perhaps it will be more accurate to say that he was killed in action if our friends in the army would allow us to use the word *action* for the comparatively less spectacular work of education which any way is more fruitful and humane than warfare.

There was very little of organisation of the College that the late Gurubandhu Bhattacharya had left when he died. What remained was the expansion of the College and that was achieved with speed. The strength of the College was increased and the B.T. Classes were affiliated to the Bombay University in 1938; this strength was further increased in 1940 when the College undertook to train teachers of all the then existing States in Gujarat, and then it became the Secondary Training College for all Gujarat. The T.D. Classes were affiliated to the University in 1941 and two years later a Department for Research of the M.Ed. and Ph.D. degrees was started. A regular M.Ed. Class for students who take it by papers was another addition made to the College when it came under the Baroda University in 1949.

The University of Baroda is among the youngest universities in India. Soon after its inception it started organising teacher education and educational research on progressive lines. One of the first acts of this University was to raise the College to the Faculty of Education and Psychology. It wisely recognised education as a science and psychology as its inseparable ally. On the model of the Indian Science Congress, it put educational science and psychology under one section and department.

Even during its early days the Baroda Training College was conscious that the progress of teacher education in the country depended largely on inter-collegiate contacts and co-operation. It made some efforts in a number of ways to establish such contacts. It has on its annual programme an inter-collegiate debate, and an inter-collegiate essay competition which is open to students of all Training Colleges affiliated to the universities in India. The Journal of Education and Psychology which I have the honour to edit has been another factor that has made such contacts possible. Since 1948 the Baroda Training College and the Indian Institute of Education have been co-operating in no small measure in organising and running the post-graduate M.Ed. Classes. Today we have a number of projects and programmes on hand and these we hope to get across through mutual co-operation and assistance. The First Conference of Training Colleges which is to be inaugurated this morning and to which I am welcoming you is an educational endeavour which has been made possible through the above-mentioned co-operation between the Faculty of Education and Psychology of the Baroda University and the Indian Institute of Education, Bombay.

I told you a short while ago that the Baroda University is anxious to develop teacher education on the most progressive lines. There has been in our country in recent times quite a bit of talk about the importance of teacher education and the need of giving it the highest priority in any scheme of national education. But the action and achievements in this direction have unfortunately been insignificantly small. The Baroda University is anxious to contribute substantially towards solving the problem of teacher education and educational research and it looks to the Faculty of Education and Psychology to do its best. This Conference has come at a moment when we are planning to expand our activities and to do something more realistically with a view to contribute our humble quota to the solution of the many problems that confront educational India. The advice that the Conference will be giving us today and the following three days will have far-reaching effects on the development of this Faculty.

When Shri M. T. Vyas, R. V. Parulekar, J. P. Naik and myself first thought of a conference of training institutions,

we had an ambitious plan. We felt that all training institutions—primary and secondary—should be included in the Conference. We realised soon that this would be a stupendous task beyond our capacity and at present not within the reach of practical achievement. Therefore we restricted the Conference to those institutions that deal with teacher education at the university level. The problems confronting the primary training institutions are as important and pressing as those concerning our training institutions dealing with secondary teachers. This is not all. If we think of teacher education in terms of a national scheme of education comprising of compulsory primary education for children between the ages of six and fourteen as demanded by our new Constitution and provision of secondary education for at least 20 per cent of the mentally gifted children, we need 2.3 million teachers more This was the figure I presented to the Indian Science Congress in 1949 when I discussed the problem of Teachers and Educational Reconstruction in my presidential address to the Section of Education and Psychology. Out of this only a little more than 10 per cent are for secondary and the remaining 90 per cent are needed for primary schools. It is important—it is also imperative—that the problems regarding the professional education of the latter are examined. I do hope that it will be possible at a later conference to have with us at least some representatives of the primary training institutions of each linguistic region. For the present we had to, for obvious difficulties, restrict our Conference to teacher-training institutions dealing with secondary teachers.

I feel that it is appropriate that this First Conference of Training Colleges is meeting in Baroda. When an up-to-date history of Indian education will be written, Baroda is sure to find in it a glorious place. The last hundred and fifty years form the Dark Ages of Indian education. During the nineteenth century the sociological tendency in education awoke Europe from its dogmatic slumbers and compelled its rulers to provide education for all. But the right of the child to be educated by the State was denied to Indian children by our alien rulers. At this time of educational stagnation and of the despair of the human spirit, Baroda's wise ruler, H.H. the late

Maharaja Sir Sayajirao, introduced compulsory primary education in the State. Baroda thus provided for many years the only oasis in the dry educational desert of India. To this act of leadership, courage and wisdom of its great ruler the history of education provides only one parallel. It is to be found in the development of the State system of schools in Germany in the eighteenth century, through the efforts of Fredrick the Great. Almost a hundred years before other parts of Europe attempted it, this great monarch made school attendance compulsory in his country. Baroda's attempt at introducing compulsory primary education has been a similar event. Is it not in the fitness of things that the First Conference of Training Colleges, the shrines of educational wisdom and the laboratories of educational enterprise should meet in Baroda which is famous for one of the greatest educational enterprises of this country ? Is it not a happy and an auspicious coincidence that Maharaja Sayajirao University of Baroda which bears the name of the author of this great adventure in education—a prince among educators and an educator among princes—that this very university should be your host and have the pleasure of welcoming you all ?

It is, madam, very fitting that you should be here today to inaugurate this Conference and preside over its deliberations. Yourself, the daughter of one of the most distinguished Prime Ministers of H.H. Maharaja Sir Sayajirao, has a brilliant record of service in the cause of education. Your proud record of work in the cause of education in the Municipality, Legislature and the University of Bombay, your successful efforts to put this University on solid foundations and your sound contributions to many an educational venture in our country are too well known to be repeated here. You have realised that the Indian teacher is the inheritor of a proud tradition. His predecessors were for centuries men of culture, character and profound scholarship when the village watchman, the brick-layer, the rope maker, the crippled soldier or anyone whose occupation did not consume all his time or furnish him with complete living was chosen as schoolmaster in Europe. You have realised that in spite of the noble ancestry, the Indian teacher has degenerated into the cheap school

masters of today. Your great concern to raise the status, quality and dignity of the Indian teacher and to put him back on the cultural map of India—this above all makes it very appropriate that you should be presiding over this Conference. We feel certain that you will give us a bold lead in putting teacher education in its proper perspective so that our teachers of the future will be as sound and sublime as those of the past. We have an agenda which is comprehensive and ambitious, and we look forward to your wise guidance in the discussion of the many problems mentioned therein. It is my privilege now to request you to inaugurate this important Conference."

Presidential Address

Shrimati *Hansaben Mehta*, the Vice-Chancellor of the Maharaja Sayajirao University and the President of the Conference then delivered her Inaugural and Presidential Address. She said :

" I am extremely grateful to you for the unique honour you have done to me in electing me to inaugurate and preside over this first All-India Conference of Training Colleges functioning at the university level. I deem it a privilege as well as a valuable experience to be associated with your deliberations on the several important topics that figure on the agenda and shall try my best to carry out the duties that have been entrusted to me.

I have always advocated the view that the teacher occupies a pivotal position in all schemes of educational reconstruction. No scheme of educational reform, whatever its philosophic grandeur or psychological soundness, has even a remote chance of success unless adequate steps are taken to secure the right type of teachers to work it out and to equip them with the necessary general education and training. This sounds like a platitude ; but it cannot be too greatly emphasized and unfortunately, we seem to have ignored it in all those plans of educational reconstruction which are being talked of or worked out in the last three or four years. The Radhakrishnan Commission has, no doubt, made a few valuable suggestions regarding the reforms needed in the existing courses for the

B.T. and M.Ed. degrees, and in the organisation of training colleges or educational research. But it has not devoted any thought to such fundamental problems as the responsibilities of the universities towards teacher-training or the co-ordination of the work of the universities with that of other agencies working in the field. In other words, the Commission has implicitly accepted the existing structure as fundamentally sound and suggested only a few changes to modify or expand it. This is an assumption with which I do not agree and I do hold that the present situation demands far more radical measures than those envisaged by the Commission. The recent Commission on Secondary Education will probably deal with the training of secondary teachers. Even assuming that it will do full justice to the problem, the charge still remains that the problems of the training of primary or pre-primary teachers or of teachers of special or technical subjects would still remain unexplored. What we really need is a comprehensive and thorough study of the problem of teacher-training in all its aspects in the context of the new situation created by the winning of our freedom and the plans of educational reconstruction that are being, or are likely to be, undertaken in the near future. Even this Conference cannot do full justice to the problem—although it would serve an extremely valuable purpose by putting the ball in motion—partly for lack of time and partly because it has been mainly restricted, for reasons already explained by Shri Menon, to those training colleges only which function at the university level. I do believe that nothing short of a Commission appointed by the Central Government will be able to achieve worthwhile results. Such a Commission should have comprehensive terms of reference. It should be empowered to enquire into and report on the existing provision for teacher-training; its adequacy in extent or distribution; the role of the different agencies working in the field and the co-ordination of their efforts; the measures necessary to expand the existing provision of teacher-training; the reforms required in the existing courses; the formulation of new courses to supplement those already in existence (where such a step is deemed essential for proper development); the organisation of research in the theory and

practice of education in general and the selection, training, and 'refreshing' of teachers in particular; the problem of teachers in rural areas; the methods to be adopted to increase the supply of women teachers; and the allied problems of the salaries and service conditions of teachers at *all* grades and under *all* types of managements. In short, the work of the Commission should be modelled on that of the McNair Report and should broadly be devoted to the problem: how can we create and maintain in India an adequate service to select and train *all* the personnel required to implement the new plans of educational reconstruction that are being undertaken? The need and importance of such an investigation are obvious and I commend the proposal, with all the emphasis at my command, to the Central Government for its consideration.

It is not, however, enough to say that such an investigation is necessary, important, or useful. What we must realise is that it is extremely urgent and cannot, save at the risk of jeopardizing the success of all our schemes of educational reconstruction, be postponed to a future date. This extreme urgency becomes evident to anyone who compares the immense and difficult task of educational reconstruction that faces the country today with the neglected, inadequate, and, in several respects, out-of-date machinery for teacher-training that we now possess. The rebuilding of our educational structure is a Herculean endeavour. We have inherited an educational system which, at best, was inspired by such narrow ideals as the spread of western knowledge or cultivation of loyalty to the British Rule and, at its worst, merely aspired to secure recruits to the lower ranks of service under Government. It was never designed, either in character or in extent, to be a national system of education for a free country. Our old educational system, therefore, becomes obsolete in the new set of circumstances created by the attainment of freedom and our national declaration to create a truly democratic secular State, and requires an immediate and extensive overhaul. To mention but a few tasks which such an endeavour involves: we have to liquidate the huge illiteracy of the masses within 5 to 10 years; we are bound, under the directive principles of the Constitution, to introduce compulsory primary education,

for *all* children in the age-group of 6 or 7 to 14, in a period of ten years; and we must also set up a nation-wide system of social education which will provide vital civic education to all adults. These measures will secure an enlightened electorate, the first requisite of a successful democracy. But that is not all. We have to train a capable, honest and zealous leadership as well and, to this end, have to reconstruct and expand our existing system of secondary and university education. What is now an unselective system open only to those who can afford to pay the ever-increasing fees, has to be transformed into a broader and selective organisation meant essentially for the superior children. We have to provide an adequate and extensive system of scholarships so that no capable child is deprived of higher education on financial grounds. We must also develop technical and scientific education, which has been greatly neglected all along, in such a manner as to provide, without delay, all the personnel that is needed for the rapid industrialisation and development of the country. And all these and several other equally arduous tasks of educational reconstruction have to be tackled against the background of an economic crisis, an impending world war and a social and political situation of immense difficulty. This is, therefore, a task which requires the most careful planning and the help of a large band of capable and devoted workers or, to put it metaphorically, a veritable *culture army*. The recruitment, training, and maintenance of this *army* is at least as important and as vital as that of the usual defence forces; I would even regard it as more vital because the kingdom of the soul is far more precious than that of material existence.

And yet, what are the measures we are adopting to select, train, and maintain this cultural force which we so badly need today? I doubt whether we really *select* men and women for the teaching profession; it would be more correct to say that we *welcome* any individual who drifts into it for a variety of reasons, the most usual one being that he cannot obtain any other more lucrative employment. As for *maintenance,* we have not been able to introduce a national scale of salaries and the remuneration and service conditions of teachers are so unsatisfactory, particularly at the lower stages and under non-

governmental managements, that the discontent among them is far greater today than it ever was in the past and trade-union methods are being adopted almost as a matter of course. But even leaving these problems aside and taking up the question of *training* with which alone we are mostly concerned here, I find that the situation is extremely unsatisfactory. The total number of training colleges in India (I refer only to those that function at the university level) is only 62. Even these few institutions are not properly distributed over the country. Madras has as many as 10; Bombay has 6; but several States have only one or two each! Moreover, it has to be noted that even in the best provided States like Bombay and Madras, there is still need for expansion of training facilities in proportion to the extent of secondary education. What one is still more grieved to find is the general attitude of neglect that is shown by the authorities towards training institutions. This is amply borne out by the histories of training colleges so laboriously collected by Shrimati Shah. Some of the training colleges do not have their own practising schools even to this day. One Principal begins his report with the statement that his college owes its existence to the deep interest shown by the Maharaja of the State in education and goes on to observe that he started it by borrowing a table and a chair from the Principal of the local High School! During the War, so many of the training colleges were deprived of their permanent quarters. A majority of the colleges complain of being understaffed and lacking in accommodation. Not infrequently, they are deprived of funds, even for extremely vital needs. This general state of apathy and neglect is also borne out by my personal experience. I have always found that, in the life of the university, a training college is usually a back-bencher and never enjoys the attention and authority which colleges of Arts, Science, Medicine, or Engineering have. Sometimes, one cannot even help feeling that they are allowed to exist on sufferance. In the wide society at large, the teacher is ordinarily neglected as a person of no consequence; and as if in continuation thereof, in the smaller world of teachers themselves, a 'teacher of teachers' becomes a comparatively more insignificant person, a poorer Cinderella among a gathering of Cinderellas!

Quite apart from their inadequacy in number, inequitable distribution over the different parts of the country, or the general neglect at the hands of the powers that be, there are three features of our training colleges which pain me most and which, in my opinion are primarily responsible for the general backwardness of this branch of our educational system. Firstly, *our training institutions do not stand united.* We have divided education into different stages—the pre-primary, primary, secondary and collegiate. There is nothing wrong with this division ; but it has unfortunately led to a corresponding water-tight division among the teachers themselves. There is even a further category of the teachers of ' extra-curricular ' subjects who generally stand on a lower pedestal as compared to those of curricular subjects. As a corollary to this, our training institutions for secondary (graduate and under-graduate), primary, or pre-primary teachers are also isolated from one another and fail to get the broadness of outlook and the sense of vocation which a union of all training institutions would have brought to them. There is no attempt made to bring together all the training institutions even in a region ; and this Conference, as you know, is the first attempt at co-ordination on an all-India basis. Our training colleges, therefore, have yet to learn the wisdom of the old adage : " United we stand ; divided we fall ".

Secondly, I am also grieved to see *how isolated a training institution is from the schools for which it prepares teachers and very often, from its own alumni.* The importance of the co-ordination between the training college and the schools or of the closer contact between it and its alumni is so obvious that I shall not dilate upon the point. What matters is to find out whether we are taking any adequate steps to secure these ends. The information collected from the colleges shows that nowhere in India is an adequate attempt being made to co-ordinate a training institution with the schools for which it prepares teachers. Where a training college is conducted by Government, its staff is sometimes made interchangeable with the inspecting section so that the instruction in the training college may become more *real* and its staff get an opportunity to see its students actually working in schools. This is really

a poor method of bringing about a co-ordination between a training institution and the schools within its region. But even such as it is, it is not applicable at all to university training colleges or those under private management. Even in Government institutions, we find that the rule does not obtain everywhere and even where it does, it is more often honoured in breach than in fulfilment and there are several members of training college staff who never go out as inspecting officers. In fact, the Radhakrishnan Commission reports that in some training colleges, they found that no member of the staff had ever been a school teacher or had an opportunity to see their work as an Inspector. You will readily agree that this is an undesirable state of isolation and that it will have to be ended early in the interest of good teacher education. How to do this is for you to consider. I only draw your attention to this glaring defect and to the excellent suggestion that Shri M. T. Vyas has put forward in this respect, viz. that every university should establish an *Institute of Education* on the lines of the recent movement in England.

The third, and to me personally the most painful, defect of our training institutions is *their narrow sphere of work and the restricted sense in which many of them interpret their scope and functions.* When I make this statement, I should not be misunderstood as being oblivious to the excellent work that some institutions are turning out. Nor should I be interpreted as blaming those who work in our training institutions at present. I know that many of them are able and anxious to do several good things if only they *could.* But a dead weight of an unhappy tradition coupled with the general neglect to which I have already referred, makes everyone helpless and reduces standards all round. An ideal training college is a research centre which is continuously striving to discover better and better solutions of our problems; it is always in the vanguard of progressive educational thought which it seeks to propagate among the teachers through training, lectures, journals and books; it is a source of inspiration to the teachers who turn to it for giving them a sense of their vocation, for strengthening their faith, and for broadening their outlook; and it is a training centre, not only for teachers, but for all

types of personnel that education needs. Judged by these standards, where do our training institutions stand? They are not leading in educational thought; in fact, I would rather say that several of them find it difficult even to keep pace with the rapid changes that are being made in our educational system. Out of the 62 training institutions that function at the university level, not even 20 undertake some research and all the remaining institutions just do not bother themselves about it. None of our training institutions, except the few where an M.Ed. (by papers) has been recently introduced, do anything to train the specialists and administrators needed by our educational institutions. An average training college narrows its sphere down to the 'training' of teachers only and even this duty is generally interpreted, not in the wider concept of *inspiring*, but in the narrow sense of teaching them a few respectable 'tricks of the trade' that would pass muster at the inevitable examination. And one has only to read the comments of the Radhakrishnan Commission to discover how indifferently even this narrow task is done at certain centres. Is it then any wonder that the average teacher does not carry over any deep memories of his *training* days, and if he soon forgets a good deal of what he 'learnt' at the college and quietly settles down to a convenient rut in all his teaching work? I am pained, but not surprised, at these results. While, therefore, I would not lessen my condemnation of the neglect that is generally shown to training colleges, I also feel that it would be worthwhile for us to search our hearts and to find out whether we do not deserve some of this treatment and whether an intensive campaign of self-improvement is not called for. It may sound to some of you that I have been a little harsh in my analysis of the present situation. But I believe that a frank discussion of ideas is essential in such a conference whose primary object is self-examination with a view to undertaking a programme of reform.

I have now put before you what I consider to be the principal shortcomings in our system of training institutions. As I said a little while ago, the fundamental weakness of our plans of educational reconstruction is that they try to achieve very difficult and extensive results *without* re-fashioning and

improving the institutions where the teaching and administrative personnel is to be trained. I, therefore, believe that the reorganisation of our training institutions should be a very integral part of our proposals for educational reform. This conference of the representatives of training colleges, therefore, can serve a very useful purpose in this respect: it can awaken official and non-official opinion regarding the fundamental role of training institutions in a programme of educational reconstruction; it can help the training institutions themselves to compare notes with one another, to co-ordinate their activities, and to formulate solutions to the problems that they have to face jointly and severally; and it can evolve sound plans of reform which will receive the most earnest consideration at the hands of universities and State and Central Governments. This is a task of which any Conference can be proud and even a casual glance at your agenda will convince anyone that you have not only realised the scope of your duties but are setting about their performance in right earnest.

I do not have the time—nor do I think it necessary—to discuss the several important questions that you propose to discuss in the next three or four days. But I would only make two suggestions of a general nature. In the first place, I would request you to emphasize those aspects of your activities which are based on a co-ordination of an all-India character. The more I think of it, the more am I convinced of the possibilities of such co-ordination. For instance, the different training colleges in India can collaborate with one another in conducting the specialised journals which are so badly needed for academic progress and which we sadly lack at present. A very good example of this type is the Indian Journal of Educational Research and I see no reason why a similar collaboration should not enable us to conduct other journals as well. Secondly, such co-ordination can help us to plan curricular reform in a more scientific and intelligent manner. I do not advocate that *all* universities should have the *same* curriculum. But I do feel that there can be a number of golden means between dead uniformity on the one hand and sheer anarchy on the other. At any rate, the very attempt to

explain and justify our mutual differences will lead to a better understanding of the problem. Thirdly, we greatly lack the spirit of experimentation which is so essential to progress. Co-ordination on an all-India basis would enable us to undertake more experiments, to plan them better, and to reap fuller benefit from them by comparison of notes or discussion of the results. Fourthly, the extensive research that is needed to solve our problems can also be planned better and executed more cheaply, quickly, and economically if we co-ordinate our efforts in the proper direction. I need not multiply such instances and stress the point further. You will, I trust, agree with me on the necessity and importance of co-ordination. Just as a mere gathering of individuals makes a 'crowd' and *not* a 'community', any number of isolated training colleges do *not* constitute a national teacher-training service, which we need most at present, unless their efforts are properly co-ordinated.

Secondly, I would request you to look upon this Conference, not as the *end*, but merely as the *beginning* of our efforts. As I have stated already, this Conference can serve a useful purpose and lay the foundations for further advance. But such a spade-work would avail us little if we fail to evolve an organisation of our own, a common platform where we can meet again as often as necessary, an institution which would co-ordinate our activities and thereby enable us to achieve higher standards. I am, therefore, keenly interested in the proposal of evolving an *Indian Council of Teacher Education* which Shri A. N. Basu proposes to place before you and request you to give it your most earnest consideration.

I would now close this speech with an assurance which I feel it my duty to give. I am deeply interested in the problems of teacher education and am extremely anxious to raise the standards of our training institutions so as to enable them to play a vital role in educational reconstruction. I do not, therefore, feel that my duty is done by the mere inauguration of this Conference. The M.S. University of Baroda and myself will continue to take keen interest in your activities and we shall be ever willing and ready to render all such assistance as we possibly can to the pivotal cause which you all represent.

I now declare this first Conference of Training Colleges in India formally open and wish it all success."

The Inaugural Session then terminated with a vote of thanks proposed by Shri R. V. Parulekar, the Director of the Indian Institute of Education, Bombay.

GENERAL SESSION

(2 p.m. to 5 p.m.)

The General Session of the Conference began at 2 p.m. in the same place. As Shrimati Hansaben Mehta could not attend owing to unavoidable circumstances, Shri T. K. N. Menon proposed and Shri P. S. Naidu seconded that Shri *J. M. Sen*, Head of the Department of Education, Calcutta University, should preside over the session. The proposal was unanimously accepted and after Shri Sen took the chair, the proceedings of the session commenced.

Item No. 1—Review of the Training Colleges in India

Shrimati *Madhuri R. Shah* explained that out of the 63 institutions functioning at the university level (this includes the Hindustani Talimi Sangh, Wardha), detailed information was already available from 54 institutions. She proposed to collect the data of the remaining 9 institutions with the help of the delegates and to publish the whole review as a part of the final publication on the subject.

Item No. 2—Problems connected with the organisation and administration of training colleges in India

The discussion was initiated by Shri *H. Rahman*, the Principal, University Training College, Aligarh. He raised the following issues for consideration :—

(1) The problems connected with training colleges can be divided into three heads—professional equipment, quality *v.* quantity, and the prevention of relapse into unprogressive methods.

(2) Should a prospective teacher make his vocational choice at the graduate level or at the undergraduate level as is sometimes encouraged in U.K. ?

(3) How should students be selected for admission to training colleges ? Would tests serve any useful purpose ? If so, which and to what extent ?

(4) Should theory and practice run concurrently throughout the year, or should there be alternating intensive spells of each ?

(5) How should tutorial work be organised in training colleges ?

(6) Problems connected with the 'practising schools'.

(7) Reform of the examination system.

(8) The in-service training or refreshing of teachers.

He invited suggestions on these or allied items.

Shri *L. P. D'Souza* supported the proposal that prospective teachers should be selected at the matriculation level and put through a five years' course.

Shri *A. N. Basu* observed that England is discarding the system of selecting prospective teachers at the undergraduate level.

Shri *A. A. Kazimi* said that no person would be able to decide his entry into the teaching profession five years in advance. He generally drifts into it when he cannot do anything else.

Shri *M. T. Vyas* supported the idea to select a teacher 'young' if that were possible. But he suggested that the financial and other obstacles in the way will have to be removed.

Shri *M. D. Paul* felt that a system of continuous (instead of the present annual) selections would be better ; that more persons would come into the profession if a post were definitely assured to them at the end of the course and stated that, in Madras, they are now selecting teachers for appointment first and then put them through training.

Shri *C. L. Kapur* described a short three weeks in-service course he was organising at Jullunder. He felt that such courses can be planned better if different training colleges co-operated.

Shri *M. Varma* said that a teacher often could not afford to practise the new methods because his teaching load was heavy. He described an investigation on the problem which was being carried out at his college.

Shri *A. C. Deve Gowda* said that Mysore University was introducing Education as a subject at the B.A. and B.Sc. examinations. He felt that this would make an earlier choice of the profession possible. He also argued that an untrained graduate with Education as his degree subject would be preferable to one without it.

Shri *P. S. Naidu* said that the idea was already in vogue at Allahabad and Shri *A. N. Basu* spoke of his experience of the scheme at Calcutta. He felt that Education was not popular as a Honours subject.

Shri *J. P. Naik* suggested that these problems can be better solved if we try to grapple with them continuously, experiment and contact each other through periodical bulletins.

The whole matter was then referred to a Committee consisting of—

1. Shri H. Rahman—Chairman.
2. Shri B. V Bapat—Secretary.
3. Shri C. L. Kapur
4. Shri A. A. Kazimi
5. Shri C. C. Shah
6. Shri M. Varma

} Members.

Item No. 3—Organisation of an Indian Council of Teacher Education

The discussion of the subject was initiated by Shri *A. N. Basu*, Principal, Central Institute of Education, New Delhi. He described his attempts to bring such an association into

existence for several years past and said that we might materialise it now.

Shri *A. A. Kazimi* desired to know what the relation of the proposed Council would be to Universities and State Governments. Shri *J. P. Naik* explained that it would be a purely academic and advisory body and would seek recognition from them.

The *Chairman* (Shri J. M. Sen) suggested that the problems of finance and location of office of the proposed Council be considered carefully in the initial stages.

The problem was then referred to a Committee consisting of—

Shri A. N. Basu—Chairman.
Shri V. R. Mudholkar—Secretary.
Shri J. P. Naik
Shri T. K. N. Menon
Shri C. L. Kapur
Shri M. D. Paul
Shri L. P. D'Souza
Smt. A. B. H. J. Rustomjee
Shri Deve Gowda
Shri P. S. Naidu
Shri B. C. Asthana
Shri J. K. Shukla
} Members.

Item No. 4—Educational Research

The discussion of the subject was initiated by Shri *P. S. Naidu* who read the paper printed on pp. xlviii-lxi.

Shri *R. V. Parulekar* said that research on administrative problems such as enforcement of compulsion was also very important.

Shri *Vedantachari* said that problems connected with school teaching such as backwardness, etc. have also to be studied.

Shri *J. P. Naik* explained the difficulties experienced in publishing synopsis of these and said that every student submitting a thesis should be required to submit a short synopsis thereof along with the thesis.

Shri *H. Rahman* pleaded that research on the mental content of children and the methodology of teaching subjects should be given priority.

Shri *P. L. Shrimali* said that research on psychological subjects was very important and should have priority.

Shri *M. T. Vyas* said that adequate facilities should be provided to the staff of training colleges to do research on their own; that more fellowships to research students were also essential; and that research attitude should be built up even from student days.

Shri *K. B. Tergaonkar* said that research in Basic Education should be undertaken.

Shri *M. Varma* said that in several research projects a knowledge of statistics was essential and, therefore, we should be able to organise a Bureau of Statistics.

The problem was then referred to a Committee consisting of the following members:—

Shri P. S. Naidu—Chairman.

Shri D'Souza—Secretary.

Shrimati K. N. Brockway
Shri M. Varma
Shri Vedantachari
Shri V. V. Kamat
Shri T. B. Awale
Shri P. Panandikar
Shri C. L. Kapur
} Members.

The session then adjourned with a vote of thanks to the Chair.

Friday, 24th November 1950

(9-00 a.m. to 12-30 p.m.)

GENERAL SESSION

The General Session of the Conference was resumed at 9 a.m. on Friday, the 24th November 1950. Shrimati *Hansa Mehta* was in the Chair.

Item No. 5 (a) —*M.Ed. Syllabus*

The discussion of the subject was initiated by Shri *L. P. D'Souza*, the Principal, Prantiya Shikshana Mahavidyalaya, Jubalpore, who read the paper printed at pp. lxii-lxvi.

Shri *P. S. Naidu* gave an account of the M.Ed. work that is being done at the Allahabad University.

Shri *A. A. Kazimi* described the M.Ed. work that is being done at the Patna University.

Shri *J. M. Sen* gave an account of the course for M.A. or M.Sc. in Education that is now introduced by the Calcutta University.

Shri *V. V. Kamat* said that admission to the M.Ed. course should be open only to those who obtained a class at the B.A. or B.T. examination.

Shri *R. V. Parulekar* pleaded that the door of the M.Ed. should not be barred to those who did not get a class at the B.A. or B.T. But provision should be made to admit *all* deserving students.

The problem was then referred to a Committee consisting of the following persons : —

(1) Shri L. P. D'Souza (Chairman).
(2) Shri B. C. Asthana (Secretary).
(3) Shri P. S. Naidu
(4) Shri A. A. Kazimi
(5) Smt. K. N. Brokway
(6) Smt. S. P. Sukhia
(7) Shri V. V. Kamat
(8) Shri J. M. Sen
(9) Shri D. V. Chikermane
(10) Shri R. V. Parulekar
} Members. [(3)–(10)]

Item No. 5(b)—*B.T. Course*

The discussion of the subject was initiated by Shrimati *Amy B. H. J. Rustomjee* who read the paper which is printed at pp. xix-xxv.

Shri *V. V. Kamat* said that it is not proper to award a degree in education after one year's study. As in U.K., the first examination in education should be a *Diploma* and that a degree should be awarded after at least two years of study.

Shri *C. C. Shah* put forward some difficulties of the B.T. course from the point of view of the secondary schools.

Shri *L. P. D'Souza*, in reply to the criticism of Shri C. C. Shah, pointed out that members of the staff of training colleges actually gave demonstration lessons, particularly at the beginning of the college session. He also spoke of the importance of the principle of freedom to the teacher in deciding on any particular method of teaching and said that rigidity in respect of methods of teaching could find no place in a training college. With reference to the complaints made by some Principals that candidates had to earn their livelihood while under training, Principal D'Souza pointed out that, in his institution, every candidate was given free tuition, free lodging, and a substantial stipend ; the candidates being residential were kept busy all day and there was no question of trainees undertaking employment.

The problem was then referred to a Committee consisting of the following persons : —

Smt. Amy B. H. J. Rustomjee (Chairman).
Shri A. C. Deve Gowda (Secretary).

Shri V. V. Kamat
Shri A. A. Kazimi
Shri C. C. Shah
Shri L. P. D'Souza
Shri M. D. Paul
Shri S. R. Bhat
Shri P. L. Shrimali
Shri F. S. Chothia
Smt. S. P. Sukhia

} Members.

Item No. 5 (c)—Undergraduate Training Courses

It was decided that the consideration of the item be postponed for want of time.

Item No. 6—New Courses

The discussion of the topic was initiated by Shrimati *Madhuri R. Shah* who read the paper printed at pp. lxvii-lxix.

The problem was then referred to a Committee consisting of the following persons : —

Shri J. K. Shukla (Chairman).
Smt. Madhuri Shah (Secretary).
Shri A. C. Deve Gowda }
Shri C. L. Kapur }
Dr. P. S. Naidu } Members.
Shri Vedanthachary }
Shri S. R. Bhat }

Item No. 7—The Observations of the Radhakrishnan Commission

The item was passed over because all the issues involved were already covered under earlier items.

Item No. 8—The Problems of the Medium of Instruction

The problem was referred to a Committee consisting of the following persons : —

Shri H. Rahman (Chairman).
Shri M. S. Patel (Secretary).
Shri V. R. Mudholkar (Member).

Item No. 9—The Problem of Terminology in Education

The discussion was initiated by Shri *S. R. Bhat*, the Principal, S.M.T.T. College, Kolhapur, who read the paper printed at pp. xxvi-xxxv.

Shri *J. P. Naik* said that although it was an important and urgent problem, we were not at a stage when anything tangible could be decided. In the first instance, we shall have to wait for the report of the scientific terminology committee appointed by the Government of India. Secondly, full data

will have to be collected regarding the work already done in Indian languages. He, therefore, suggested that the first step to be taken now would be to compile data on the work already done.

It was, therefore, unanimously resolved that this work should be entrusted to a Committee with Shri T. K. N. Menon as Chairman. He was also authorised to co-opt such members as were necessary to assist him in the task.

Item No. 10—Educational Journals

The discussion was initiated by Shri *M. Varma* who read the paper printed at pp. i-vi.

The problem was then referred to a Committee consisting of the following members :—

Shri M. Varma (Chairman).
Shri C. L. Kapur (Secretary).
Shri S. N. Mukherji }
Shri J. P. Naik } Members.
Shri P. S. Naidu }

Item No. 11—Production of Educational Literature

The discussion was initiated by Shrimati *Madhuri R. Shah* who read the paper printed at pp. lxx-lxxii.

The problem was then referred to a Committee consisting of the following persons :—

Shri H. Rahman (Chairman).
Smt. Madhuri Shah (Secretary).
Shri T. K. N. Menon }
Shri K. Yagnik }
Shri C. L Kapur } Members.
Shri M. Varma }

Item No. 12—Co-ordination of Library Facilities

The item was passed over for want of time.

Item No. 13—Psychological Tests

The discussion was initiated by Shri *M. D. Paul,* the Principal, Training College, Saidapet, Madras, who read the paper printed at pp. lxxiii-lxxxviii.

The problem was then referred to a Committee consisting of the following persons : —

Shri M. D. Paul (Chairman).
Shri F. S. Chothia (Secretary).
Shri V. V. Kamat }
Smt. S. Panandikar } Members.
Shri N. N. Shukla }

Item No. 14—Educational and Vocational Guidance

The discussion of the subject was initiated by Shri *F. S. Chothia*, the Vocational Guidance Officer of the Government of Bombay. He read the paper which is printed at pp. xvii-xviii.

The Session was then adjourned to 2-30 p.m. on Saturday, the 25th November 1950.

Saturday, 25th November 1950

(2-30 p.m. to 5-30 p.m.)

The Closing Session of the Conference began at 2-30 p.m. on Saturday, the 25th November 1950. Shrimati *Hansa Mehta* was in the chair.

The session was specially attended by Mr. H. Poleman, the Cultural Attache to the American Embassy, New Delhi, who said :

" Distinguished Chairwoman, Ladies and Gentlemen

I bring you greetings from America and American Educators.

I have had the privilege of discussing the work of the Conference with various delegates and organisers and I wish to congratulate you on the forward steps you have taken to organise and integrate the work of training colleges of India.

The work which you are doing will be of great assistance to the Exchange of Persons Programme between India and the United States. We shall welcome your co-operation.

The United States Government is planning for the exchange of teachers at the training level. It is anticipated that American teachers will come to India at the invitation of your

government to assist you in your training programme. The provision of training for Indian teachers in the United States is also contemplated. The results of the surveys and studies which you make will enable us to work together and to plan the programme of exchange to meet exact needs.

Let me assure you that the briefness of my visit here is no measure of the interest we have in the work you are doing and will do. I look forward to our close co-operation and to the mutual benefits to our programmes which this will bring.

I wish to thank you for the hospitality and friendship which you have shown me and again to congratulate you on the formation of this organisation."

Mr. Poleman then left the Conference as he had to start immediately for Delhi.

Item No. 3—Organisation of an Association of Training Colleges in India

Shri *J. P. Naik* said that the original proposal to establish an Indian Council of Teacher Education was considerably modified by the Committee. After discussing all aspects of the problem, it was unanimously agreed that a humbler beginning should be made and that an *Association of Training Colleges in India* be established. He, therefore, requested that priority should be granted to the report of the Constitution Committee.

This was granted and then Shri *V. R. Mudholkar* presented the following draft of the Constitution which had been unanimously approved by the Committee :—

THE ASSOCIATION OF TRAINING COLLEGES IN INDIA

1. The name of the Association shall be the " Association of Training Colleges in India ".

Explanation : The expression " training college " shall mean an institution which provides a course for teacher-training recognised by a University.

Provided, however, that the Executive Committee may admit to membership such institutions of teacher-training as in its opinion, are functioning at the University level.

2. Its registered office shall be at such places as the Executive Committee may decide from time to time.

3. The objects of the Association are :—

(1) To hold periodical conferences of training colleges ;

(2) To serve as a clearing-house for information re : the training of teachers at the University level ;

(3) To publish literature bearing on teacher-training at the University level ; and

(4) To do all such other things as may be necessary to further the above objects of the Association.

4. The membership of the Association shall be open to all training colleges as defined in Rule 1. Each member institution shall pay an annual membership fee of Rs. 12 and shall be entitled to send not more than two delegates to the Conferences of the Association.

5. The Executive Committee of the Association shall hold office for a period of two years. It shall consist of

(*a*) President,

(*b*) Vice-President,

(*c*) 12 members, and

(*d*) 2 Secretaries.

6. The Executive Committee shall take all steps to carry on the work and administration of the Association in accordance with the decisions of the Conference. It shall decide its own rules of business.

7. All matters not specifically provided for in this constitution shall be decided upon by the President in consultation with the Executive Committee. But all such decisions shall be communicated to all member-institutions and shall be laid before the next Conference for confirmation.

8. The following shall constitute the first office-bearers and the Executive Committee of the Association and they shall continue to be in office till the Executive Committee be elected at the next Conference of the Association :—

President :

Shrimati Hansa Mehta.

Vice-President :

Shri A. N. Basu.

Secretaries :

Shri T. K. N. Menon (Baroda).
Shri A. C. Deve Gowda (Mysore).

Members

Shrimati A. B. H. J. Rustomjee (Bombay).
Shrimati K. N. Brockway (Madras).
Shri J. M. Sen (Calcutta).
Shri A. A. Kazimi (Patna).
Shri P. S. Naidu (Allahabad).
Shri M. Varma (Nagpur).
Shri L. P. D'Souza (Jubalpore).
Shri M. D. Paul (Madras).
Shri J. P. Naik (Bombay).
Shri H. Rahman (Aligarh).
Shri C. L. Kapur (Jullunder).
Shri J. K. Shukla (Ahmedabad).

The Constitution was unanimously adopted.

Item No. 15—Training of Teachers and Research in Basic Education

The discussion was opened by Shrimati *Sulabha Panandikar*, Deputy-Director of Public Instruction and Secretary, Advisory Board for Basic Education, Bombay State. Giving an account of the scheme of training graduates in Basic Education as adopted by the Government of Bombay, she said that the principal object of training was to staff the institutions for training primary teachers (which Government now proposed to convert into Basic Primary Training Institutions) and to train officers for the inspection of Basic Primary Schools. Only trained graduates were admitted to the course which was of one year's duration and the salient features of the training imparted were the following :

(i) Teaching a main craft (spinning and weaving or wood-work) and two subsidiary crafts (kitchen-gardening and spinning or cardboard modelling) for 2½ hours a day and training in the teaching of the craft.

(ii) Principles and practice of Basic Education comprising the philosophy and ideological bearings of Basic Education in the light of modern educational and psychological trends and the Technique of correlated teaching which is considered to be the most suitable method for primary schools.

(iii) Community life with emphasis on self-sufficiency.

(iv) Service to the community by actual work in the neighbourhood supplemented by camps.

(v) Research in Basic Education which comprises production of literature (*a*) suitable for children in Basic Schools and (*b*) to teachers in Basic Schools.

Finally, she placed before the Conference for its consideration the problem whether a trained graduate should be made to undergo a course of one year's training or an ordinary graduate should be made to undergo training for 18 months or 2 years so that he might be fitted for service in the ordinary schools as well as the Basic Training Colleges and the Inspecting line. In view of the fact that craft had been introduced in the first three (and in some cases, first five) classes of secondary schools and that the fundamental principles of Basic Education were universal in application it was for consideration whether an integrated course of training could not be instituted.

Shri *A. A. Kazimi* following the discussion narrated the progress of Basic Education in Bihar and wanted to know whether the University would be prepared to give the B.T. Degree after two years' training as suggested by Smt. Panandikar. He wanted to know whether going out into villages for social service was a sort of propaganda and whether it served any useful purpose.

Shri *J. M. Sen* objected to the distinction between Basic and ordinary education and emphasized the advisability of one comprehensive system of training teachers. He agreed with

Shrimati Panandikar on the desirability of evolving a method of training teachers in such a way as to fit them for all branches of education.

Shri *M. Varma* observed that prior to starting research in Basic Education, it should be considered whether it was an advisable method of education and had any distinctive advantages.

Shrimati *K. N. Brockway* described the method of training in Madras and pointed out the great utility and educative value of social service which was a part of Basic training.

Shri *Vedantachari* from Hyderabad pointed out that there was unwillingness on the part of teachers to undergo Basic training and wanted to know the practical incentives to overcome this and the advisable basis for selection of teachers for training.

Shri *J. K. Shukla* answered some of the criticisms of the speakers who followed Shrimati Panandikar and gave an account of the educative and reforming value of social service done in rural areas by the trainees as part of the practical work in sociology.

Shri *R. V. Parulekar* of Bombay observed that he had no objection to all the good things such as social contacts included in Basic Education which, in his opinion, could be included even in ordinary education. He characterised Basic Education as craft-centred education and wanted to know whether, as such, it had any utility.

Shri *V. R. Mudholkar* answered, in particular, the criticism of Shri R. V. Parulekar and observed that in the whole history of Primary Education, there was no effort at including what Shri R. V. Parulekar described as 'the good things' in Basic Education. He further pointed out that craft was not merely one additional subject mechanically taught but was included to concretise to the child the abstract process of social life.

Shri *A. C. Deve Gowda* observed that social service was expensive and precluded self-reliance on the part of villagers.

Shri *J. P. Naik* said that Government fought shy of publishing the results of research in Basic Education and observed that Government should finance, but not control, educational

research if a scientific attitude was to be maintained. He also objected to introduction of craft on financial grounds.

Shrimati *Sulabha Panandikar* then replied to the various criticisms and, in particular, the observations of Shri J. P. Naik.

Item No. 16—Creation of a National Teacher-training Service in India

The item was passed over for want of time.

Item No. 17—The Time and Venue of the next Conference

On behalf of the University of Mysore, Shri A. C. Deve Gowda invited the delegates to the next Conference at Mysore. The invitation was unanimously accepted and it was resolved that the President be requested to communicate the thanks of the Conference to the University of Mysore.

Item No. 18—Publication of Proceedings

The item was passed over for want of time.

Item No. 19—Other Subjects

Three items had been suggested :

(*a*) Training of Junior lecturers, especially in Intermediate Colleges ;

(*b*) The methods to be adopted to increase the supply of women teachers ; and

(*c*) The suggestion of Dr. P. S. Naidu that the following point raised at the UNESCO Seminar in London be considered :

" At the UNESCO Seminar in Teachers' Training held in London in August 1948 the question of organising an International Body of Teachers' Training to study Teacher-training on a World-basis was raised. Participating members were requested to get into touch with representative bodies in their country and place the following questions before them for discussion :

(1) Should we have an International Body for studying Teacher-training ?

(2) If so, should membership be individual or institutional ?

(3) What should be the means for promoting the aims of such a world organisation ?

(a) Year Book of Teacher-training, Research, etc. ;
(b) An International Journal ;
(c) Exchange of research literature ; and
(d) Exchange of Teachers and Students of Training Colleges."

All the three suggestions were passed over for want of time.

Item No. 20—Presentation of the Reports of the Committees

Shri *B. V. Bapat* presented the Report of the Committee appointed under item No. 2.

Report of the Special Committee on the Organisation and Administration of Training Colleges

The Committee appointed to consider and report on problems connected with the organisation and administration of Training Colleges in India, met in Room No. 3 of Circuit House at 3-30 p.m. on 24-11-1950. The following members were present.

(1) Prin. H. Rahman (Chairman).
(2) Shri C. L. Kapur.
(3) Shri C. C. Shah.
(4) Shri A. A. Kazimi.
(5) Shri B. V. Bapat (Secretary).

Principal Satyanarayan was also invited to attend the meeting.

After a long discussion the Committee made the following recommendations :—

1. With a view to recruiting the right types of prospective teachers, this committee recommends that, whenever possible, selection of students for Training Colleges should be based on academic and professional records and on the results of Intelligence tests, Admission tests and interview, designed to reveal the range of the candidates' knowledge and abilities and his personal qualities.

2. This committee recommends that Practice programme should not be confined to teaching alone but should include

(*a*) practice in the maintenance of school registers and records and in administrative and inspection work ; and

(*b*) participation in extra-curricular activities and community work.

3. As far as possible, Training Colleges and Departments of Education should have their own practising schools attached to them and whenever it is necessary to have other schools, there should be close co-operation between the Heads of the Schools and the Principals of the Colleges.

4. To ensure the continued professional growth of trained teachers and to prevent their lapse into unprogressive methods, the committee made the following recommendations :

(*a*) Award of the degree or diploma in Education should not be made immediately on passing the examination but after one year of approved service in a recognised school.

(*b*) Frequent opportunities for inspection, supervision and guidance of trained teachers in schools within their region should be offered to members of the Training Colleges or the University Departments or Faculties of Education.

(*c*) Refresher courses and vacation courses (both general and special) should be instituted.

5. University Departments of Education or Training Colleges should maintain a register of past students with a view to helping them to secure suitable posts."

The Report was referred to the Executive Committee for consideration.

Shri *L. P. D'Souza* then presented the Report of the Committee appointed under item No. 4.

Report of the Special Committee on Banning, Promotion, Co-ordination and Publication of Educational Research in India

Members Present:

(1) Shri P. S. Naidu (Allahabad)—Chairman.
(2) Shri M. Varma (Nagpur).
(3) Shri R. V. Parulekar (Bombay).
(4) Shri B. C. Asthana (Lucknow).
(5) Shri D. V. Chikermane (Belgaum).
(6) Shri J. M. Sen (Calcutta).
(7) Shri J. P. Naik (Bombay).
(8) Shrimati K. N. Brockway (Madras).
(9) Shri Awale (Satara).
(10) Shri L. P. D'Souza (Jubalpore)—Secretary.

1. *Review of educational research*: The Committee finds it difficult to review the educational research done so far in India at the present moment because of very insufficient data. The Committee, however, feels that the total amount of educational research work done so far in India is unsatisfactory, and in order to improve the situation, makes the following suggestions:

(*a*) The Committee finds it premature at this stage to list problems for educational research, and feels that it can suggest no priority.

(*b*) The Committee further suggests that the proposed Association of Training Colleges in India should be entrusted with the work of addressing the various Universities and Training Colleges asking these to send in lists of topics for research, and that the Association should circulate a consolidated list of these topics to all Training Colleges and Universities.

The Association should also gather information regarding topics on which research is being carried out at the present moment.

2. *Measures to develop research* (a) The Committee resolves that the Central and State Governments, and the Universities should make specific grants for educational research.

(b) Special facilities should be given to selected members of the Training College staffs to enable them to undertake research for themselves.

(c) The Committee recommends that the teachers who have to their credit approved research degrees, or qualifications, should be given advanced increments and preference for higher appointments.

The Report was referred to the Executive Committee for consideration.

Shri *B. C. Asthana* then presented the Report of the Committee appointed under item No. 5(*a*).

Report of the Special Committee on M.Ed. Course
Members Present:

Shri L. P. D'Souza (Jubalpore)—Chairman.
Shri P. S. Naidu (Allahabad).
Shri A. A. Kazimi (Patna).
Smt. K. N. Brockway (Madras).
Smt. S. P. Sukhia (Agra).
Shri V. V. Kamat (Bombay).
Shri J. M. Sen (Calcutta).
Shri D. V. Chikermane (Belgaum).
Shri R. V. Parulekar (Bombay).
Shri B. C. Asthana (Lucknow)—Secretary.

The Special Committee took up for discussion the note prepared by the Chairman on the M.Ed. Courses and made the following recommendations

1. *Admission*: The examination for the degree of M.Ed. should be open to a candidate who has after graduation passed the B.T., B.Ed., L.T. or an equivalent examination held by a State Government or by any recognised University of India, *but* preference should be given to those who have, in addition, put in a year or more of teaching.

2. *Duration of the course* Should be at least one academic year for those students who do the course on full-time basis. A full-time student is one who attends the College for not less than 4 hours per working day for the purposes of

lectures, tutorials, practical and library work, and who is not employed.

For part-time students, the duration of the course should be two academic years.

3. *The M.Ed. Examination* should be

(i) partly by papers and partly by dissertation, or

(ii) entirely by thesis.

The M.Ed. Examination should not be entirely by papers.

It should also consist of a *Viva Voce* taken on (*a*) Practical work and (*b*) theme of dissertation or Thesis.

4. *Aims of the M.Ed. Courses* are (*a*) training in research techniques, (*b*) creating personnel for the staff of training colleges, and higher posts in education departments, etc., and (*c*) creating experts for specialised branches of education.

5. *Papers*: In the light of the above aims, the Committee suggests the following orientation re: papers for the Examination:

Compulsory:

Paper I. Advanced Psychology of Education and Educational Sociology (including a course of Practical work).

Paper II. Philosophy of Education.

Paper III. Development of Education in modern India and comparative education of India and *two* other countries.

Optional:

Paper IV (*a*) Experimental Education, and Educational Statistics,

or

(*b*) Administration of education and Inspection of schools,

or

(*c*) History of Education.

In addition to the above four papers (of three hours each) a dissertation on an educational topic, practical work in

experimental psychology and *Viva Voce* should be an obligatory part of the examination.

Each paper should carry 100 marks. The dissertation, practical work and *viva voce* should carry 200 marks (i.e. 1/3rd of the total number of marks).

The minimum marks for passing should be 30 per cent in each paper, 40 per cent in dissertation and 40 per cent in aggregate to pass the whole examination.

6. *Dissertation* :

(*a*) A dissertation should be made obligatory for all M.Ed. students who take the examination partly by papers and partly by thesis.

(*b*) A dissertation should have bearing on any aspects of education embodying either (i) the record of the original investigation or (ii) a critical analysis of the existing data, or (iii) a combination of both.

(c) A dissertation should be accompanied by a Certificate signed by a recognised post-graduate teacher stating that the dissertation is worthy of examination.

7. *Co-ordination of M.Ed. Courses* : In the opinion of the Committee it is desirable to co-ordinate research work done at different Universities and for this purpose the Association of Training Colleges in India should arrange to publish synopses of theses and dissertations :

8. *Teaching* : Teaching should not form a part of the M.Ed. Course and should have its natural end at the B.T. level.

The Report was signed by all members except Shri *J. M. Sen* who signed it subject to the following observations :—

(1) That the M.Ed. course should not be awarded by thesis only ; and

(2) that the part-time students should devote more than two years as a registered student of the course.

The Report (along with the Minute of Dissent) was referred to the Executive Committee for consideration.

Shri *A. C. Deve Gowda* then presented the Report of the Committee appointed under item No. 5(*b*).

Report of the Special Committee on the B.T. Course

Members Present :

Principal Amy Rustomjee (Bombay)—Chairman.
Dr. V. V. Kamat (Bombay).
Shri K. B. Tergaonkar (Dharwar).
Shri P. L. Shrimali (Udaipur).
Shri P. K. Chhatre (Baroda).
Shri S. R. Bhat (Kolhapur).
Shri R. V. Parulekar (Bombay).
Shri S. P. Sukhia (Agra).
Shri A. A. Kazimi (Patna).
Shri D. V. Chikarmane (Belgaum).
Shri B. V. Bapat (Poona).
Miss K. N. Brockway (Madras).
Shri A. C. Deve Gowda (Mysore)—Secretary.

1. The committee recommends that every State should have an adequate number of Training Colleges to train all those who wish to be trained.

2. The committee strongly recommends that the training of teachers should be free in all Training Colleges and that Training Colleges should be subsidized for this purpose where necessary.

3. The name of the degree should be "Bachelor of Education".

4. The duration of the course shall be one academic year of study at a Training College. This shall be followed by one academic year of teaching in a school. The theory examination may be taken at the end of the first year or the second year but the Practical examination shall be taken at the end of the second year only.

5. The courses of study for the B.Ed. degree shall include :

(A) *Compulsory Part* :

(1) Principles and Philosophy of Education.

(2) Educational Psychology including Mental and Educational Measurements.

(3) School Organisation and School Hygiene.

(4) General and Special Methods of Teaching two school subjects.

(B) *Optional Part* :

(5) One of the following subjects *may* be selected by the students in addition to the above four :—

(*a*) History of Education.
(*b*) Educational Statistics.
(*c*) Comparative Education.
(*d*) Basic Education.
(*e*) Adult Education.
(*f*) Audio-Visual Education.
(*g*) Vocational and Educational Guidance.
(*h*) Juvenile Delinquency.
(*i*) Mental Hygiene and School Clinics.
(*j*) Education of the gifted and the Subnormal Children.
(*k*) Educational Administration.
(*l*) Detailed study of some Outstanding Educators.
(*m*) An advanced course in any of the subjects included in the compulsory part.

6. The committee recommends that for every 8 students there shall be one full-time teacher on the staff of a Training College in order to assure full supervision and guidance of practical teaching.

7. *Practice of Teaching*: The minimum number of fully supervised lessons to be given by each student should be 30. The Principal of the College on the recommendation of his staff may exempt certain outstanding teachers from a certain number of these lessons or may require a larger number of lessons from students who may be considered to be in need of more practice and guidance. There should be no objection if about 5 of these lessons are given in a primary school.

8. *Scheme of Examination* :

(a) *Theory*

4 papers each carrying 100 marks.

1 paper carrying 100 marks (additional optional subject).

(b) *Practice*

200 marks for the Practical examination at the end of the second year.

200 marks for work done throughout the year consisting of practice lessons, essays, laboratory work, preparation of teaching aids and any other practical activity organised by the College.

Each lesson given for the Practical Examination shall be observed by an equal number of external and internal examiners.

Each student must pass separately in each part of the Examination, viz. Theory and Practice. He shall obtain not less than 30 per cent in each paper of the theory part and 40 per cent of the aggregate marks in that part. The candidate who passes in the optional additional subject will have it entered in the certificate. In the practice part he shall obtain not less than 30 per cent of the marks at the Final Practical Examination and a minimum of 30 per cent of the marks for work done during the year. He shall obtain not less than 40 per cent of the total marks in this part.

The Report was referred to the Executive Committee for consideration.

Shrimati *Madhuri R. Shah* then presented the report of the Committee appointed under item No. 6.

Report of the New Courses Committee

Members Present:

(1) Shri J. K. Shukla (Chairman).
(2) Dr. P. S. Naidu.
(3) Shri C. L. Kapur.
(4) Shri Vedantachary.
(5) Shri Hariprasad Bhatt.
(6) Shrimati Madhuri Shah (Secretary).

In view of our growing and diverse educational needs the training of personnel required for the work of educational reconstruction has become very urgent. The Committee thinks that the following types of New Courses should be started by the Teacher-training Institutions:—

1. *Short-term Courses* (a) Pre-Training Courses for those who either by reason of average or other factors have not had the benefit of regular training and also for those whose services may be required for the teaching profession in the present emergency occasioned by schemes of educational expansion. They will, however, be recalled for the regular training at the earliest opportunity.

(b) *Refresher Courses*: Intended for those who have had training and who require to be brought into touch with the modern developments in educational theory and practice. They may be open to the teachers and inspectors as well.

2. *Special Courses* For those who have had their first regular training (B.T., B.Ed., etc.) and who are required to undertake work of a specialised nature of the following kind :—

(*a*) Administration and inspection.
(*b*) Adult education and social work.
(c) Educational guidance (including educational statistics).
(*d*) Vocational guidance.
(*e*) Basic education.
(*f*) Child guidance and child psychology.
(*g*) School economics.

The Committee recommends that the short-term courses be undertaken by the Education Departments of various States and the special courses be organised and run by the Training Colleges and Universities.

The Committee also feels that the Executive Committee of the Association of the Training Colleges in India should appoint a committee or committees to go into the details of the various courses and their duration.

The Report was referred to the Executive Committee for consideration.

Shri *M. S. Patel* then presented the Report of the Committee appointed under item No. 8.

The Committee on the Medium of Instruction met at the Circuit House at 3-30 p.m. on Friday the 24th November 1950 when the following members were present :

(1) Shri H. Rahman (Chairman).
(2) Shri M. S. Patel (Secretary).
(3) Shri V R. Mudholkar.

After examining all the aspects of the problem, the Committee unanimously decided to make the following recommendation to the Conference :

" The Conference is of the opinion that the regional language should be the medium of instruction and examination at all stages of teacher-training except at the post-graduate stage, where the National Language should be the medium of instruction and examination as soon as possible in lieu of English. The reform should not be deferred on the ground merely of the absence of text-books or suitable terminology in regional languages."

The Report was referred to the Executive Committee for consideration.

Shri *M. Varma* then presented the Report of the Committee appointed under item No. 10.

Report of the Special Committee on Educational Journals

The Committee was of opinion that many of the existing journals of education in the country are not of sufficiently high standard, generally speaking.

To improve the standard of such journals, the committee make the following recommendations :—

1. Sufficient quantity of research reports and writings of a high quality be turned out regularly by members of the educational profession, including training Colleges and University Departments.

2. The States take an active interest in the educational journals current in the country by collecting statistics of those subscribed by aided and government schools and subsidizing where necessary.

3. The Educational institutions organise reading clubs and teacher discussions to promote the study of the subscribed journals.

4. The Association set up a Journals' Committee to start and maintain a Journals' Register and prepare and maintain a list of journals approved on merit and payment of fees prescribed by the Committee. It be the duty of the member-institutions to subscribe these " approved " journals and assist in their working and sale by exploiting regional contacts.

5. The following specialised categories are needed and effort should be made to bring such journals into existence :—

(i) Journals for parents and children.

(ii) Journals for infant and primary stage.

(iii) Journals for secondary schools and colleges.

(iv) Journals for experimental education and research.

(v) Journals of women's education.

(vi) Journals of the handicapped.

(vii) Special subjects journals.

The Report was referred to the Executive Committee for consideration.

Shrimati *Madhuri R. Shah* then presented the Report of the Committee appointed under item No. 11.

Report of the Special Committee on the Production of Educational Literature

In the opinion of the Committee the term " literature needed for educational reconstruction in India " includes school text books on the theory and practice of education and work both at research level and of a general nature on education.

The Committee made the following recommendations

(*a*) That a standing publication committee be set up ;

(*b*) (i) That the Committee suggest or call for titles on which books may be written or research carried out ;

(ii) invite lists of intending authors or researchers ; and

(iii) select suitable authors and entrust them with preparation of books or with the prosecution of research ;

(*c*) That the Committee arrange for the publication of such literature by any of the following agencies :—

(i) Publishing firms.
(ii) Universities.
(iii) Private organisations or individuals.
(iv) The authors.

(*d*) That the Association of Training Colleges, on the recommendations of this committee, try to secure financial aid for conduct of research or for publication from various agencies such as the Central or State Governments, Universities, private organisations or individuals.

The Report was referred to the Executive Committee for consideration.

Shri *F. S. Chothia* then presented the Report of the Committee appointed under item No. 13.

Report of the Special Committee on Psychological Tests

The proceedings opened with a paper read by the Chairman of the section, Dr. M. D. Paul. Mrs. Samarth, who has standardised a group test of intelligence (in Marathi), then dwelt on the practical difficulties confronted by framers of tests. Mr. Varma referred to the problem of validity and suggested that care should be taken to maintain proper records in schools. Mr. Chari stressed the importance of diagnostic tests.

A committee consisting of the following :

Chairman : Dr. Paul

Secretary : Shri F. S. Chothia

Members : Dr. Kamat, Mrs. Samarth and Miss Panandikar

discussed the matters raised in the general session. The following are its recommendations :—

(i) In the preparation and standardisation of tests well-defined objectives should be kept in view.

(ii) The framing and standardisation should be done by experts and research students at the M.Ed. and Ph.D. levels.

(iii) Universities and Government Departments should help to finance projects of test standardisation; they should also secure the co-operation of schools in such projects.

(iv) In view of the language problem tests should be prepared in all the principal languages of the country, and therefore, the work of standardisation should be carried on in as many linguistic areas as possible, taking into consideration differences of culture, sex, socio-economic status, etc. This recommendation should not be interpreted to mean that there is no need of tests of an all-India character which could be utilised to compare performances in different areas.

5. Priority should be given to tests of intelligence, achievements and aptitudes.

6. Preference should be given to the framing of group tests rather than individual tests.

7. To save labour in the future, equivalent forms of the same test should be prepared at the same time as the original test.

8. The Association of Training Colleges should maintain a complete record of the work done in the different parts of the country and co-ordinate the activities of its members.

9. Combined projects by research students should be encouraged and the Universities should recognise such projects, provided the supervisor certifies that each student has contributed sufficiently to the project.

10. To help research workers, short intensive courses in the techniques of test construction and standardisation should be held in difficult centres.

11. Schools should be encouraged to test the progress of children by objective tests prepared *ad hoc* by teachers with the assistance, if necessary, of local experts. If such tests are prepared on a scientific basis, they can be made use of in the preparation of a fully standardised test for the area.

The Report was referred to the Executive Committee for consideration.

On behalf of all the delegates Shri J. M. Sen, then thanked the Maharaja Sayajirao University of Baroda and the Indian Institute of Education, Bombay, for having organised the Conference and brought the workers in training colleges together. He also thanked the President, Principal T. K. N. Menon, Shri R. V. Parulekar, Shri M. T. Vyas, Shri J. P. Naik, and Shrimati Madhuri R. Shah for the hard work they had put in to make a success of the Conference. He expressed his special gratitude to Principal T. K. N. Menon, the members of his staff and the students who had all worked day and night to make the delegates comfortable in every way. The vote of thanks was seconded by Shri A. A. Kazimi, C. L. Kapur and Amy B. H. J. Rustomjee.

The President then thanked all the delegates for their excellent co-operation and declared the Conference over.

MADHURI R. SHAH	HANSA MEHTA
Organising Secretary.	*President.*

PART TWO

PAPERS CIRCULATED TO THE CONFERENCE

MESTON TRAINING COLLEGE
MADRAS

FIRST CONFERENCE OF TRAINING COLLEGES IN INDIA

BARODA — 23rd, 24th and 25th November 1950

PROGRAMME

The following is the tentative programme for the First Conference of Training Colleges in India :

Thursday, 23rd November 1950

9-0 a.m. to 10-30 a.m.	1. Welcome Speech by Principal **T. K. N. Menon**, Principal, Teachers' Training College, Baroda.
	2. Inauguration of the Conference and Presidential Address by Shrimati **Hansa Mehta**, Vice-Chancellor, M. S. University, Baroda.
	3. Thanksgiving by Shri **R. V. Parulekar**, Director of Indian Institute of Education, Bombay.
11-0 a.m. to 12-30 p.m.	Visits to Educational Institutions in Baroda. (Detailed programme will be sent later.)
3-0 p.m. to 5-30 p.m.	1. General Session of the Conference. Delegates will speak broadly on the items on the Agenda and put forward their views on the problems under discussion.
	2. Election of the following Committees :
	(a) **Constitution Committee** for the proposed Association of Training Colleges in India.
	(b) **Educational Research Committee** to consider the planning, promotion, co-ordination and publication of educational research in India.

(c) **M.Ed. Syllabus Committee:** The Syllabus for M.A. in Education will also be considered by this Committee.

(d) **B.T. (B.Ed., Dip.Ed., or L.T.) Syllabus Committee:** The Syllabus for B.A. in Education will also be considered by this Committee.

(e) **T.D. Syllabus Committee:** (All syllabuses for undergraduate Training will be discussed by this Committee.)

Each Committee shall have a Convener who will draft its report and submit it to the General Conference.

5-30 p.m. **At Home** by the Faculty of Education and Psychology of the M. S. University, Baroda.

Friday, 24th November 1950

9-0 a.m. to 12-30 p.m. and 3-0 p.m. to 5-30 p.m. — Meetings of Committees.

5-30 p.m. **At Home** by the Indian Institute of Education, Bombay.

7-0 p.m. Musical Concert.

Saturday, 25th November 1950

GENERAL SESSION

9-0 a.m. to 12-30 p.m.

1. Presentation of the Reports of the Committees by the Conveners.
2. Discussion and Adoption of the Reports.

General Session

3-0 p.m. to 5-30 p.m.	1. Moving and Adoption of Resolutions. 2. President's Concluding Remarks. 3. Thanksgiving.
5-30 p.m.	**At Home** by the Vice-Chancellor of the M. S. University of Baroda.

N.B.—(1) The above programme does not include the item **Reading of Papers.** This will be included in the programme suitably **after** the papers are received. For this purpose, the afternoon session will begin at 2-0 p.m. instead of at 3 p.m. and, if necessary, even a session at 8-30 p.m. might be held on any or all the three days.

(2) Delegates who intend to read papers should send them to the Organising Secretary not later than 15th November 1950.

(3) Delegates desiring to move resolutions are requested to send their resolutions to the undersigned on or before the 1st November 1950 at the latest.

(4) Papers regarding the items on the agenda are being printed and will be sent to the Delegates in good time and before 15th October 1950. Suggestions for additional items, or amendments to or alterations in the proposals made, should be sent to the undersigned on or before the 15th of November 1950.

(5) Formal invitations to attend the Conference are being sent individually to the delegates.

(6) A meeting of the **Editorial Board of the Indian Journal of Educational Research** will also be held. The time and date will be announced later.

FIRST CONFERENCE OF TRAINING COLLEGES

BARODA — 23rd, 24th & 25th November 1950

AGENDA

[*Important.*—Every Principal invited to the Conference is requested to go through the agenda very carefully and send to me, not later than 31st October 1950, his views on each item included in the agenda or the information called for therein. The reply should be typed, in double space, and on one side of the paper only. If possible, a separate sheet should be used for the reply to each item. This would facilitate the consolidation of views and data according to the topics and their printing for advance circulation to all delegates.

It is essential that the Conference should elicit the opinion of the largest number of persons engaged in teacher-training although only a few can be invited to attend it. It would, therefore, be very desirable if the Principals, who have been invited to the Conference, would please make it convenient to discuss the agenda in a staff meeting and send in their replies in the light of the discussions.

It is needless to say that, if all Principals would send in their views in time as suggested above, they can be circulated to the delegates in advance and the work of the Conference would be better and quicker—*Organising Secretary.*]

1. *Review of Existing Training Colleges in India* :

It is expected that the Principal of every college would send in a *Note* regarding his own institution giving data under the following heads : —

1. Name of the Training College.
2. Address.
3. Brief History.

4. Courses taught (university to be mentioned).

5. No. of students for whom accommodation is available.	Course :	No. of students.
6. Fees	Course :	Fees (with details)

7. Research work done so far (in detail).
8. Special features or activities undertaken by the College (in greater detail).
9. List of all Members of the staff with their qualifications.
10. Publications issued by the college.
11. List of Research Papers published by the staff and students of the College (copies of papers to be enclosed whenever possible).
12. Such other relevant information as the Principal deems it fit to supply.

It is proposed to print all these Notes in the Proceedings of the Conference.

2. *Problems connected with the administration of Training Colleges* :

A. Colleges affiliated to Universities, or conducted by Universities, or University Departments of Education.

(1) Are they equitably distributed in different parts of India ? Do they provide the necessary accommodation required for training all the teachers of secondary schools ? And do they provide the required facilities for training the administrative personnel required by the Education Departments ?

If the finding on the above issues be negative, what steps must be taken to expand and/or reorganise the existing training colleges or to start new ones ?

(2) What should be the minimum qualifications for a member of the staff of a training college ?

N.B.—All Principals are requested to send in a copy of the existing rules on the subject as sanctioned by their university.

(3) What should be the salaries of the members of the staff of training colleges ?

N.B.—All Principals are requested to send in a statement showing the different scales of pay as they exist at present in their colleges.

(4) What measures should be adopted or machinery set up with a view to bringing about a better co-ordination between—

(*a*) the different training colleges in India ;
(*b*) the training colleges and the High schools for whom they train teachers ; and
(*c*) the training colleges and other types of teacher-training institutions ?

(5) Types of extra-curricular activities that should be organised by a training college.

(6) What activities, other than teacher-training and research, should be organised by the training colleges in order to make themselves more useful to the cause of educational reconstruction in India ?

B. Institutions of teacher-training other than those mentioned in (A) above.

N.B.—As these will not be represented at the first conference, only general questions regarding the manner in which

they can be roped in to join the proposed Indian Council of Teacher Education would be discussed.

3. *Organisation of an Indian Council of Teacher Education* :

   (1) Its desirability.

   (2) Details of organisation.

N.B.—A draft constitution for the Council has been prepared by us and is being circulated separately. All Principals are requested to send in their views on these proposals as early as possible.

On the first day of the Conference, this problem will be discussed in broad outline. The matter would then be referred to the Constitution Committee whose report would come up for final consideration on the last day.

4. *Planning, promotion, co-ordination and publication of educational research in India* :

   (1) Review of the research in education done so far in Indian universities.

   (2) Listing of problems on which research is required, with some indications of priority.

   (3) Measures to be adopted to organise research work on a larger scale in Indian universities.

   (4) Measures to be adopted to co-ordinate and plan the educational research that is being done in the Indian universities.

   (5) Measures to be adopted for the publication of educational research in India.

   (6) Measures to be adopted for the fostering of educational research by agencies other than training colleges and their co-ordination with the research work done in Indian universities.

N.B.—The subject would be discussed in broad outline on the first day. All papers received on the subject would then be referred to a special committee whose report would come up for final consideration on the third day.

5. *Syllabuses :*

It is proposed to discuss in detail the syllabuses of the various courses for teacher-training prescribed by the Indian Universities. A separate and detailed note on each such syllabus has been prepared by the undersigned and will be circulated to all Principals very shortly. The Principals are requested to send in their comments on the proposals not later than 15th November 1950.

On the first day of the conference, the subject will be discussed in broad outline only. All the papers would then be referred to three special committees whose reports would come up for discussion on the final day.

6. *New Courses :*

(1) What types of new courses (with broad outline of syllabuses) would be required to train all the different types of personnel required for educational reconstruction in India ?

(2) What would be the administrative and financial implications of the proposals ?

7. *Any other subject that may be brought forward at the Conference with the permission of the President.*

N.B.—Suggestions for additions to the agenda should be sent to the undersigned as early as possible but not later than 15th November 1950.

MADHURI R. SHÂH,
Organising Secretary.

TRAINING COLLEGE

ITEM No. 1 OF THE AGENDA

TRAINING COLLEGES IN INDIA

By

MADHURI R. SHAH, B.A., M.Ed.

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In this article, I have made an attempt to give a brief history of some of the institutions in India which prepare teachers for Secondary Schools. The notes given here are based on the information supplied by the Principals so far. Other notes will be consolidated and circulated in due course.

1. THE GOVERNMENT TRAINING COLLEGE, RAJAHMUNDRY

(Affiliated to the Andhra University)

The beginnings of this institution are to be traced to the Elementary Normal School opened by the District Board, Godavari, in 1883, which, seven years later, was raised to the rank of a Secondary Grade Normal School, and, after a lapse of two more years, was taken over by the Government in 1892. With the opening of the L.T. class in February 1894, the school attained the status of a *College*; but for administrative purposes, it was placed under the supervision of the Principal of the local Arts College. On the completion of the present building in 1899, the whole of the Training College, along with the Model School, was removed to it. It then consisted of the L.T., Upper Secondary, Lower Secondary, and Primary Departments; but it still continued to be under the supervision of the Principal of the local Arts College in spite of the increase in its size.

In the course of the next decade, the Training College became fairly popular, and the L.T. class numbered 17 in 1910. But Government felt that the expenditure incurred on it was

far too great in proportion to its usefulness. The L.T. Class was, therefore, cut out from the Rajahmundry College and amalgamated with the Teachers' College, Saidapet, in July 1911. In 1914, the scheme of reorganization of the Higher Elementary Training Schools came into force, and in accordance with it, the Higher and Lower Elementary training classes were transferred to the jurisdiction of the Inspector of European and Training Schools, and were removed to a separate rented building. The College, therefore, practically ceased to exist between 1911 and 1917.

The provision for the training of the Telugu graduates at Saidapet, however, was soon felt to be inadequate, especially in view of the more pressing demands of the Southern Districts. Government, therefore, sanctioned, in May 1916, the re-opening of the Teachers' College at Rajahmundry to serve the needs of the Telugu Districts. The proposal was to train a batch of fifty graduates a year and the staff was not to be inferior to that of the Teachers' College, Saidapet. The new Training College was opened on the 2nd July 1917 and was placed under a separate Principal and made independent of the local Arts College. Since then, about 2,700 graduates have received training in it.

In the year 1949-50, a special course of training, of three months' duration, was conducted by Government for the benefit of Graduate Secondary-grade Trained Teachers with not less than three years of teaching service in recognised schools. The trainees were awarded the Collegiate Trained Teachers' Certificate by Government.

In addition to the existing subjects, Basic Education is likely to be introduced as one of the compulsory subjects for training from the year 1950-51.

The institution is not engaged in any research work in Education at present. The Andhra University provides for M.Ed. (by thesis) only ; but so far no thesis has been submitted.

2. FACULTY OF EDUCATION, OSMANIA UNIVERSITY

(a) *Brief History* : The Training College, Hyderabad (Dn.), is a constituent institution of the Osmania University

and prepares teachers—men and women—for the B.Ed. and M.Ed. examinations of the University. The B.T. (now B.Ed.) examination was held for the first time in 1929 and the M.Ed. examination in 1941. The College offers up-to-date facilities for the training of teachers both in theory and in practice of education. Research facilities are provided for in M.Ed. course which makes a dissertation obligatory.*

(b) *Fees, Scholarships and Prizes*: No tuition fee is charged from teachers under training deputed by the Hyderabad Education Department or by the Hyderabad Aided Schools. Six scholarships of Rs. 50 per month, tenable for one academic year, are also awarded by the Education Department for men teachers under training; Four scholarships of the same type are awarded for women teachers who join the B.Ed. classes as private candidates. The following medals are also awarded :—

(i) *Sir Akbar Hydari Gold Medal*, awarded annually to the candidate who stands first in the B.Ed. examination.

(ii) *Sajjad Mirza Gold Medal*, awarded to the candidate who secures first class marks in the M.Ed. examination and stands first in the examination.

(iii) *Sir Mehdi Yar Jung Gold Medal*, awarded to the candidate who attains the required skill in teaching in the class and stands first in the competition—open only to the B.Ed. students.

(c) *Teaching Practice*: At present, no practising school is attached to the College, but arrangements for teaching practice have been made in seven Government and two Aided schools—five for men and four for women.

(d) *Educational Handwork and Drawing*: Instruction is also imparted in (i) Drawing and Blackboard Illustration, and in (ii) Manual Training.

(e) *Educational Exhibition*: The Educational Exhibition of the College is held once a year. Educational illustrations

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* For the list of dissertations approved by this University, *vide*, Journal, Vol. I, No. 1, pp. 18-21.

and teaching devices of various kinds prepared by the students in the course of their training during the year are displayed therein.

3. VIDYA BHAWAN GOVINDRAM SEKSARIA TEACHERS' COLLEGE, UDAIPUR

(a) *Introduction*: This Teachers' College, Udaipur, is a part of Vidya Bhawan which was founded by Dr. Mohan Sinha Mehta in 1931. Its main object was to build up a sound and scientific system of education suited to the culture and genius of the Indian people and the needs of the Indian society, either now or in future. In common with other national experiments in progressive education, the Vidya Bhawan has passed through very trying, almost tormenting times. But it is a satisfaction to recollect that all that suffering has not been in vain and that the Bhawan has made a useful contribution to educational progress in many directions.

In 1941, the Vidya Bhawan Society took another step forward by starting the Teachers' College. Originally, the College prepared students for the Teachers' Training Certificate Examination of the Board of High School and Intermediate Education, Rajputana, Central India and Gwalior, and served the needs of this area; but it is now affiliated to the University of Rajputana and prepares candidates for the B.Ed. degree of that University.

(b) *Buildings*: The College received a generous donation of Rs. 1,00,000 from the late Seth Govindram Seksaria. It was utilised for its building which stands on an eminence, near the picturesque Fateh Sagar Lake, commanding a fine view of the landscape in the valley around Udaipur.

(c) *Special Features*: The following are the special features of the College:

(i) *Scheme for the Training of Teachers in Service*: In order to raise the standard of efficiency of teachers under training, a scheme has been drawn up for the extension of training even beyond the usual academic course. Under this scheme, the education of teachers will be continued both on theoretical and practical lines for two academic years after the

completion of the regular training course at the Teachers' College. During that period, the pupil teachers will work under the guidance of the Principal and the staff of the Teachers' College who will, by periodical visits, keep in close touch with their pupils' development as teachers, and help, in every possible way, in the practical application of educational theory to their work in ordinary class-room conditions. Till the financial resources of the College improve, the benefit of this scheme will be extended only to those teachers who are deputed by the States which are willing to meet the expenditure incurred on working the scheme. It is intended to remove this restriction as soon as it is found practicable.

(ii) *Training in Social Work*: At the end of the professional course, a short training in social work is arranged for six weeks. The course consists of some lectures in social sciences such as Economics, Rural Life, Educational Reconstruction, Family and Child Welfare, Public Health and Sanitation, etc., and practical association with social service and social welfare organisations such as Play Centres, Adult Education Activities, etc. The pupil teachers are expected, during the period of this training course to do some practical social work under the guidance of the staff. It would, therefore, be seen that the main object of this short course is to develop a social outlook in the teachers and also to awaken an interest in social service and welfare in their minds.

(iii) *Educational Experiments and Practical Work in Psychology* Every year, the Vidya Bhawan High School holds its OPEN AIR SESSION for about a fortnight, in some spot of natural beauty or a place of historical or geographical importance. A special syllabus is drawn up for this session by the staff of the Vidya Bhawan High School and the Teachers' College. Pupil teachers are taken out to study this special experiment; and are divided into groups of three or four, each of which is attached to a Shreni (the Camp Class of the High School). Under the guidance of the lecturers, they make careful observations of the reactions of this special educational method on the children. The results of this study are produced in the form of a report which includes, among

other things, the observation of the behaviour of the children and the educational work of the school in camp.*

4. PATNA TRAINING COLLEGE, PATNA

The Patna Training College is a Government institution for the professional training of teachers of secondary schools and subordinate inspecting officers. It was first opened in October 1908 when it prepared candidates for the L.T. examination of the Calcutta University to which it was affiliated till 1916-17. With the establishment of the Patna University, it was affiliated to it. During the year 1915-16, two classes were opened, one to prepare graduates for the B.T. examination and another to prepare Intermediate-passed teachers for the L.T. examination.

Under the Patna University Regulations, the B.T. course was changed into B.Ed. and the L.T. course was maintained as it was. But in 1926, the L.T. course was abolished and two new courses—a one year's course for the *Diploma-in-Education* and another two years' course for the B.Ed. degree were instituted. Since then, only graduates are admitted to the College, the admissions to the B.Ed. class being restricted to selected candidates from among the Diploma holders. In 1931, the teaching course was divided into two branches—one for the training of teachers in secondary schools and the other for the training of prospective Sub-Inspectors of Schools and headmasters of E.T. schools. Thus there are, at present, two sections in the Diploma Class the secondary and the primary sections.†

In 1935, the B.Ed. examination was abolished and a new course for the Master of Education degree was instituted. This class is popular in the province as well as outside.

Previous to 1938, not more than 44 students used to be admitted to the Diploma Class; but to meet the growing demand for trained graduates the size of the class has been

* A survey of these reports would be extremely interesting—*Editors.*

† Patna is the only University in India which recognises the fundamental principle that the training required for an Inspector of Primary Schools is different from that of Secondary Teachers and provides for it.

expanded and provision has been made for 90 students in the Diploma Class (including 10 women graduates). In the M.Ed. class, not more than 10 students from among the Diploma passed candidates or candidates with equivalent qualifications are usually selected for admission.

No fees are charged for tuition at this college. Formerly there was a provision of some stipends to the students of the Diploma Class. But at present, no male student is given a stipend and only five women candidates are awarded stipends to the value of Rs. 22 a month each. There are 5 stipends in the M.Ed. class—one of Rs. 25 and the rest of Rs. 20 per month each. All the Diploma students get free text-books which are taken back at the end of the course.

5 PRANTIYA SHIKSHAN MAHAVIDYALAYA, JUBBULPORE

(a) *The Past*: The Prantiya Shikshan Mahavidyalaya, Jubbulpore, formerly called the Spence Training College, is the biggest Teachers' Training College in Madhya Pradesh and one of the oldest in India. Its history may be traced to the year 1890 when a training class was opened at Nagpur for secondary school teachers. In the beginning, there was hardly any distinction between courses for graduates and those for undergraduates. Owing to the efforts of Mr. Spence, the Superintendent, the institution was transferred to Jubbulpore in 1902 for improving facilities for teachers' training and was amalgamated with the Normal Schools. Soon after the transfer, the Secondary Department of this combined Institute was split up into three sections: (i) *Graduate's Section* taking a year's course, (ii) *Experienced Teacher's Section* for undergraduates taking one year's Course and (iii) *Under-graduates Section* taking a Course for two years. A school of the Anglo-vernacular type was also developed and attached to the Institute.

In 1904, the present building was constructed opposite the District Courts at a cost of Rs. 44,000. The A. V. School gradually developed into the Model High School and has served the purpose of a practising school since then.

Between 1902-1907, teachers from Assam and East Bengal also used to be deputed for training at this Institute.

This Training Institute was reorganised in 1911 with Mr. Spence as its first Principal; and a year later, it was affiliated to the Allahabad University for the L.T. degree. The Training College building was extended and more accommodation was provided in the hostels. The practising school was also located in the College Compound. The new building was formally opened in 1919 by Sir Benjamin Robertson, the then Chief Commissioner of the Province. Mr. Spence retired from service in 1922 and the College was named as the Spence Training College in memory of his invaluable services to the institution. The College was affiliated to the Nagpur University in 1923 and since 1946, it is under the academic control of the University of Saugor. In March 1948, the name of the College was changed to Prantiya Shikshan Mahavidyalaya.

(b) *The Present*: At present, the college has four Departments preparing candidates for the various Degrees and Diplomas in Education. The *M.Ed. Classes* admit ten students for the post-graduate degree in Administration or Teaching. The *B.T. Department* admits 128 students and there are an equal number in the *Dip. T. Department* for undergraduate teachers' training. The Psychology Department prepares 30 candidates each year for M.A. Degree Examination in Psychology applied to Education and Social Service. The Basic Education Department and Home Science and Music Departments impart instruction in these subjects offered by students of the B.T. and Dip. T. Classes.

The following are some of the special features of the College:—

(i) *The Psychological Tests*: The Psychologist to the Government of the Central Provinces and Berar is deputed to the College. Besides helping in the lecture work in Psychology, he supervises the work of constructing psychological tests and administering them to the population of High School students with a view to standardising and validating them. He is also sometimes entrusted with the work of

administering tests to the entrants to the Government Engineering School, Nagpur.

(ii) *Social Education Work*: The College runs a Social Education Class for the benefit of illiterate adults. It also organises training courses for Social Education Workers and teachers wherein instruction is imparted in the Psychology of Adults and methods of teaching different subjects to them. Special lectures in Social Education are delivered at the College to the B.T. and Dip. T. students.

(iii) *Extension Lectures*: The College organises Extension Lectures in the evening twice a week with a view to bringing the College in close touch with the educated public and other educational institutions and explaining to them the important aspects of education in popular language. The lectures are delivered by the members of the College Staff and important persons from outside are invited to preside on these occasions.

(iv) *The Refresher Courses*: Refresher Courses are held in this College for the Head Masters and Assistant Masters of the Government and aided Middle Schools of the Provinces. In these courses, emphasis is laid on the recent trends in the methodology of teaching different subjects, school organisation, curriculum-making and adult education. The teachers are allowed to read freely from the College Library, and watch the lessons in the Practising Schools. They are also given opportunities to discuss their difficulties in teaching the subjects, with the specialist Staff at the College.

(v) *The Staff*: The College has a staff of 41 members (including the Principal).

6. THE DEPARTMENT OF EDUCATION, UNIVERSITY OF ALLAHABAD

The University of Allahabad was the first University in U.P. to institute and to organise a course of studies for the Master's Degree in Education. A long tradition of research in the advanced branches of Arts and Science formed the favourable background against which advanced degrees in Education,

namely the M.Ed. and D. Phil. Degrees, could be instituted here with ease.

(a) *The M.Ed. Degree*: (1) Philosophy of Education, (2) Advanced Education in Psychology, (3) Psychology of Childhood and Adolescence, (4) Experimental Education and Statistics, (5) Comparative Education, and (6) Vocational Guidance and Selection are the subjects of study for the M.Ed. Degree. The distinguishing feature of the course is the Dissertation which a candidate for the M.Ed. Degree has to submit. This has to embody the results of an original piece of research carried out by the candidate under the direct supervision of the staff of the Education Department. Through these dissertations, individual and group verbal and non-verbal tests, tests of mechanical and academic aptitudes, attainment tests in the fundamental subjects, aptitude and interest tests—all these have been constructed for conditions prevailing in U.P. It might be quite correct to say that in no University in India has the work of dissertations been so well organised as at Allahabad.*

Since the year 1948, the M.Ed. Course has grown very rapidly in popularity. The College is compelled to restrict its admissions for financial and other reasons; but it is gratifying to note that young men and women are now eager to take up research in Education which was so long neglected in our country.

(b) *D. Phil. Degree*: A number of theses are being prepared for this degree also.†

(c) *Education at the B.A. Stage*: Education has been introduced as an optional subject at the B.A. stage and has proved to be popular. The introduction of Education as a subject for the students of the B.Sc. class is under consideration by the Faculty of Science.

(d) *The University Training College*: With Education as a subject of study for the undergraduates at one end and with the Master's Degree in Education at the other, there is

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* For titles of these dissertations, *vide*, Journal, Vol. I, No. 1, pp. 6-9 and 62-4.

† *Vide* Journal, Vol. I, No. 1, p. 62.

naturally a gap to be filled in by a University Training College. A University Training College functioning as an integral part of a residential University has its own distinctive features and its products will have a distinctive hall-mark. Plans for the organisation of such a Training College have been prepared and it is hoped that Government will soon sanction the necessary funds for starting it.

7. TILAK COLLEGE OF EDUCATION, POONA

The Tilak College of Education was started in June 1941 by the Shikshan Prasarak Mandali with the two-fold purpose of imparting training in class-room instruction and developing a centre of educational research.

The main function of the College has been to prepare students for the B.T. Examination of the Bombay University (and since 1949 of the Poona University). During the last eight years, as many as 555 graduates have been trained as teachers. The number would have been much larger but for the unusual war conditions. Simultaneously, the College has also organised a Research Department. Upto now, two research students have secured the M.Ed. degree, and three have submitted their theses for the same. At present, six students are working for the Ph.D. degree and four for the M.Ed. degrees.*

Recently, the Bombay University instituted an M.Ed. examination by papers, the first examination being held in July 1948. The Tilak College of Education was the first College to provide regular instruction for the new course. Seven students secured the M.Ed. degree by papers in 1948, nine in 1949, and seventeen in 1950.

At present, the college imparts instruction for the B.T. course, the maximum number admissible being fixed at 100, and the M.Ed. course (for which admission is not restricted) in any of the four optional groups. Guidance is also provided for research work leading to the M.Ed. and Ph.D. degrees.

From the very inception of the college, one of its objectives has been to develop a good psychological laboratory. Despite

* *Vide* Vol. I, No. 1, p. 21 and pp. 60-1.

the difficulties of obtaining equipment during the war years, a good deal of material has been obtained and some has been specially got prepared. The laboratory is now equipped sufficiently well to serve the present needs and would also serve as a nucleus for experimental work on a much wider scale.

8. SECONDARY TEACHERS' TRAINING COLLEGE, BARODA

(a) *History* : This College owes its origin to the need felt by the Government of Baroda for trained teachers in Secondary Schools. It was started in 1935 and its first Principal was the Late Gurubandhu Bhattacharya of the Dacca Training College. In 1938, the College was sanctioned as a permanent institution by the Baroda Government and was affiliated to the University of Bombay.

(b) *Courses of Studies*: The College provides for the training of 75 graduates for the B.T. Degree and 30 undergraduates for the Teaching Diploma. It admits a limited number of research students who work under the guidance of recognised Professors in the College for the M.Ed. and Ph.D. degrees. The College has also started, since 1949, an M.Ed. Class of 25 students who will prepare for the degree by offering papers instead of theses. A course leading to a Certificate in Physical Education is also run by the College.

(c) *Practising High School*: The Baroda High School founded in 1881 forms the Practising School of the College. Besides the Baroda High School, the College uses the Government Maharani Girls' High School, Shree Sayaji High School and Shree Pratap High School for teaching practice. Other High Schools of the city are also used by the College for school practice, if and when the necessity arises.

(d) *Present Strength of the College* : The present strength of the college is as follows :—

Course	Strength	Fee per student per year Rs.
B. T. Class	100	300
T. D. Class	25	120
M.Ed. by Thesis	6	100
Ph.D. by Thesis	3	100
M.Ed. Class by papers	25	300

(e) *Research Work*: The results of the studies and researches of the staff of the College appear every year in the form of books and papers published by them. *The Journal of Education and Psychology* which deals with researches on the problems of modern educational theory and practice is edited by the Principal of the College.

(f) *Inter-Collegiate Debate and Essay Competition*: The College, in co-operation with the College Union, holds every year an Inter-Collegiate Debate and a similar Essay Competition. The former is open to all students of Training Colleges affiliated to the Bombay University and the latter to the students of Training Colleges affiliated to *any* University in India.

(g) *Refresher Course for Trained Teachers*:—Every year the College organises a Refresher Course for trained teachers with the object of preventing them from lapsing into pedagogical illiteracy and of keeping them abreast of modern development in educational theory and practice. Trained teachers are encouraged to attend these courses at the periodical interval of five years.

9. SECONDARY TEACHERS' COLLEGE, BELGAUM

(a) *General*: To provide opportunities of training to the Secondary Teachers of Karnatak, the S.T. College, Belgaum was started by the First Congress Government and began its work from June 1939. The College was originally housed in the Sardars' High School, Belgaum, as a temporary measure; but a spacious building of its own is now under construction and the College is soon proposed to be shifted to it. The Sardars' High School is also used as a practising school and provision is made to give practice lessons in five private High Schools that are situated in the vicinity. The medium of instruction in the College is English; but the practice lessons are given both in Kannada and Marathi. Wrangler P. S. Katti, the first Principal of the College realised the importance of mother-tongue and introduced it as the medium of instruction in all the subjects of the curriculum except English. Since then, instruction in the Sardars' High School is imparted through the mother-tongue.

Provision has been made to train 100 students per year. So far, 720 pupil teachers have been trained (out of these, 142 are women). In one year, due to war conditions, the number of trainees was as low as 40. War and economic depression and lack of incentive were chiefly responsible for this fall in number ; but the situation has improved now.

(b) *Post-graduate Studies*: So far 10 candidates have obtained the M.Ed. degree and two have obtained the Ph.D. degree of the Bombay University by offering theses. Very recently, post-graduate students are allowed to take their degrees partly by papers and partly by thesis or wholly by theses or papers. About 24 students are taking advantage of this facility under the guidance of a University Teacher.

(c) *Karnatak University*: The Karnatak University started to function in 1949 and the College, which is situated within its area, has now been affiliated to it. It was formerly affiliated to the Bombay University.

10. TEACHERS' COLLEGE, SAIDAPET

(a) *Origin*: The Madras Normal School opened in 1856 in the City of Madras is the nucleus of the Teachers' College of today. The institution has to its credit a total period of existence of almost a century and is justly proud of having had on its rolls such eminent personalities as Dr. S. Radhakrishnan, Sir Samuel Ranganathan and the late Right Hon'ble V. S. Srinivasa Sastri.

(b) *History*: In the 94 years of its history, the college has undergone several changes both in the course of studies followed and in the sphere of its activities.

(i) In the early years, all students of the Normal School were given a course of general instruction and were at the same time trained for the work of teaching.

(ii) In 1862, the subjects of study were changed so as to enable students to prepare for the several University examinations also.

(iii) In 1872, it was deemed expedient to narrow the sphere of its work by limiting it to professional training only.

(iv) In 1876, it was resolved to introduce instruction in certain useful subjects, not included in the ordinary school curriculum. A beginning was made with agriculture.

(v) In 1886, the name and scope of the school were changed when it was affiliated to the Madras University and began to prepare candidates for the L.T. Degree examination.

(vi) It was in 1887 that this Teachers' College was transferred to its present site at Saidapet.

(vii) In 1911, the college was reorganised. There existed only one college for the Presidency to train students for the profession of teaching till 1917, when the Training College at Rajahmundry for the Andhras was opened.

(viii) It was only in 1921 that women graduates were provided with a separate college—The Lady Willingdon Training College. Till then, women were trained in this institution.

(c) *The College Department*: At present, the College Department affords facilities for the study of eight optionals for the B.T. course—Tamil, Natural Science, History, Geography, Physical Science, Basic Education, Mathematics and English. Provision is made for the teaching of three hobbies this year—Woodwork, Cardboard work and Pottery painting—in view of the introduction of hobbies in the High School curriculum. The maximum admission capacity of the College is 150.

(d) *Secondary-grade Training Department*: The Secondary Basic Training Section provides training facilities for a maximum strength of 80 at a time in two sections (Junior and Senior: 40 each), but the present strength is only 54, 33 Seniors and 21 Juniors.

(e) *Manual and Art Masters' Training Department*: The Manual Training and Art Masters' Classes provide training for teachers of vocational subjects in woodwork, woodcarving,

and engraving, for 20 to 25 students every year. This is the only Training School of this type for the Presidency.

(f) *The High School and the Kindergarten Department*: The High School (16 sections in Forms I to VI) and the Kindergarten Section (10 sections in classes 1 to 5) form the practising sections of the B.T. and Secondary-grade students.

(g) *The Pandits' Training Section*: A class for the training of Tamil Pandits was opened in 1948 and it has a strength of 16 students.

(h) *The Nursery Section*: A Nursery Class has been started this year and is attached to the Kindergarten Section.

(i) *Adult School*: An Adult Night School, established in July 1927 is being managed by the Social Service Association of students under training. This year it has been recognised by the Department under the scheme of Adult Education. A supervised night-study class is also run for the benefit of High School pupils who cannot command sufficient convenience for study at home.

(j) *Post-graduate and Research Studies*: The College helps the conduct of the M.Ed. Class, run on a co-operative basis, at the Meston Training College, both in the matter of lectures and supervision of theses.

The members of the College staff have published, in the regional language, several books on educational topics, such as *Suggestions for the Teaching of Tamil; Child Nature and Education*; and *Educational Psychology.*

The evil features of examinations have been avoided by abolishing terminal examinations and their place has been taken by new-type tests in all the subjects and these tests are conducted regularly in the High School Forms. Thereby, proper assessment of the progress of the pupils is ensured. Another piece of work undertaken is the systematic preparation of word-lists pertaining to the two lowest classes of the Primary Section.

(k) *Short Courses*: The College also provides for a short course of 3 months' instruction for the benefit of Secondary-

grade trained teachers who have subsequently taken the B.A. Degree and on the passing of an examination conducted by the Education Department at the end of the course, they are awarded the Collegiate Trained Teachers' Certificate.

11. LADY WILLINGDON TRAINING COLLEGE, TRIPLICANE, MADRAS

The College was started in 1922, but its history can be traced further back to 1856, when the Madras Normal School was opened to train teachers for their vocation. The next important landmark was in 1885 when the University instituted the L.T. degree examination and the Normal School became the Teachers' College from which the pioneer women teachers graduated; but they were only a few in number each year. The Lady Willingdon Training College for women was started in response to the need to train a larger number of women teachers and it sent up its first batch of candidates for the L.T. degree in 1923. This College was a development of the first Hindu School for girls in Madras run by the Vijayanagaram Trust in the latter half of the nineteenth century and taken over by the Government of Madras in 1913 and extended into a training school for Elementary and Secondary-grade Women teachers. From the beginning, this institution emphasized the need to teach the basic crafts of the country, through which alone the true value of handicraft could be secured. It was only in 1940, after 18 years of struggle in the midst of inadequate accommodation and equipment, the College moved to the new building, designed on modern lines; it was also fortunate in having its traditions built under the inspiring and continued guidance of Miss Gerrard who was Principal from 1922 to 1946.

The College now has three types of teacher training courses, namely: (*a*) B.T., (*b*) Secondary Basic, and (*c*) Elementary Basic Training Sections. Despite the disparity in the educational background of the students, the College emphasizes the common aims of the teachers' vocation, in all grades, and all the students are brought together through the union and other activities. The college is also collaborating in the conduct of the M.Ed. course conducted at Madras.

12. ST. CHRISTOPHER'S TRAINING COLLEGE, VEPERY, MADRAS

(a) *History* : St. Christopher's Training College, a Christian college for women teachers, was opened in 1923 with a class of eleven graduate students and one student who was not working for a degree. It has grown since that time, not only by reason of the expansion in girls' education, but through amalgamation, on two occasions, with other institutions. In 1928, it was amalgamated with Secondary Training Schools previously managed by a Scottish Mission and in 1935 with one of the oldest girls' Schools in the city, the Bentinck Girls' High School (founded in 1832). Finally, since 1944, St. Christopher's College has co-operated with the three other training colleges in Madras City in teaching for the M.Ed. degree in Education. There are now 175 students in the College and over 800 girls in the practising school.

(b) *Work done by St. Christopher's College* Seven hundred and eighty-one B.T. (or L.T.) students have been trained in the College and 756 Secondary students. These are to be found in schools and homes throughout India. There are also old students in America, Britain and in Africa. The College keeps in touch with numbers of old students through the Old Students' Association of the College and its magazine " Offero ", first published in 1926.

The College has always emphasized the importance of residential life. Every effort is made to break down the barrier between different communities, between staff and students, and between the two grades of students (B.T. and Secondary). The College also believes the saying " learn to teach by teaching " and from the first, much emphasis has been placed on actual teaching in a variety of secondary and elementary schools.

This College was the first to recommend the introduction of Home Science as an optional subject in the L.T. (B.T.) course of Madras University and Home Science has been taught in this College since 1929.

The importance of Indian languages is realized by the College authorities. Tamil is one of the B.T. optional subjects

and this is the only College in Madras that offers Telugu as an optional subject in the B.T. course. Every year a prize is offered for the best story, play or informative article written in an Indian language by a past or present student. Some of these have been published. There are parallel Tamil and Telugu classes in the Secondary Training Section and in the College practising school, the Bentinck Girls' High School.

The staff of the College is well qualified to help in the advanced studies of education. Three members of the College staff, Miss Forrester, Miss Cornelius and Miss Matthew hold Doctorates in Education. Different members of staff have co-operated enthusiastically on committees for the reorganization of secondary education and have, at the request of Government, written Guide-books explaining the reorganized courses. Dr. (Miss) Cornelius had much to do with drawing up of the syllabus in Social Studies. Demonstration in the teaching of this subject has been given in the Bentinck School. Dr. Forrester's booklet 'Introducing Social Studies' has been widely appreciated. Several members of staff have also written, or co-operated in the writing of, school books.

From July 1949 Basic Education has been offered as an optional course for the B.T. degree in this college and in the practising school.

13. MESTON TRAINING COLLEGE, ROYAPETTAH, MADRAS

The Meston Training College was opened in 1937. It developed out of the former Wesley College and Wesley High School, started by the Wesleyan Methodist Missionary Society in 1851. The College is supported by Missionary Societies in Great Britain, the United States of America and the continent of Europe. The affairs of the College are vested in an Association registered in Madras. The College is a Constituent College of the University of Madras and prepares men students for the Bachelor of Teaching Degree. Opportunities for teaching, observation and practice are provided in six Secondary schools in the city. The College also co-operates with the three other Constituent Training Colleges in conducting

the Master of Education Degree Course for both men and women. There are two Hostels attached to the College.

14. ST. ANN'S TRAINING COLLEGE, MANGALORE

St. Ann's Training College, opened in 1943, is an aided institution under the management of the Apostolic Carmel, a teaching Order of indigenous Roman Catholic Sisters who have 3 Colleges, 3 Training Schools, 37 High Schools, 11 Elementary Schools and Orphanages in various parts of India and Ceylon. The Apostolic Carmel had opened a Training School, known as the St. Ann's Training School, in Mangalore, in 1890, to train both Secondary—and Elementary-grade teachers. Over 2,000 teachers have been trained in this School. In 1929, the Elementary-grade section was closed down.

The need for starting a Training College for Graduate teachers was felt very early, as South Kanara has several large High Schools for girls—more than in any other District in the Madras Presidency. But the University turned down the proposal in 1931. When the Congress Ministry assumed power in 1937 and enforced the mother-tongue as the medium of instruction, the need for training teachers to teach in their own vernaculars became more apparent. The Apostolic Carmel authorities once again took up the question of opening a Training College. They received both sympathy and encouragement from the Director of Public Instruction and the Vice-Chancellor, and permission was granted to open the College in 1943. About the same time, a Training School for Malayalee Secondary-grade Teachers was opened at Ottapalam, and a Training School for the European High School Certificate students at Cannanore.

The St. Ann's Training College is affiliated to the Madras University and trains every year 30 students in the B.T. Section and about 45 in the Secondary-grade Section. The percentage of results has always been the best in the University. Last April, 13 out of 29 secured a Second Class, one of them ranking First in the Presidency and winning the Gold Medal for Teaching. But the primary aim of the College—and the aim for which it was founded—is to secure personal

efficiency among teachers, a high sense of devotedness to duty and self-sacrifice in the service of souls.

15. THE TEACHERS' COLLEGE, MYSORE

The Faculty of Teaching which was started by the Mysore University in the year 1925-26, for training students for the B.T. Degree Examination, was a part and parcel of the Maharaja's College, Mysore. Training was imparted to the teachers of the Department of Education in Mysore, who were deputed for that purpose, and to those graduates who intended to take up Teaching as their life profession.

The Policy Committee for Education and Committee for Finance and Co-ordination of the Government of Mysore recommended the establishment of an independent Teachers' College to provide trained teachers for all grades of schools and inspecting officers for the Department of Education in Mysore. The Mysore University also recommended the establishment of a Teachers' College as one of the constituent Colleges of the University. The College was, therefore, started in June 1947. It has one Practising High School and one practising Middle School attached to it and provision for the starting of a Practising Primary School is also made.

The College is, at present, providing training to 80 students each year. Out of these 80 students, 20 are deputed from the Department of Public Instruction in Mysore, 35 are deputed by the various Municipal and Aided High Schools of the State, and the rest are fresh graduates who intend taking up teaching as their profession.

It is the intention of the University to provide, in this College, an experimental and research educational laboratory in order to initiate, stimulate and guide experiment and research in education. For this purpose, a Psychology Laboratory with modern equipment and research facilities is being established in this College.

Provision for the starting of courses for the M.Ed. degree was made during 1948-49 ; but at present, there are no students who are studying for this Degree.

16. THE DAVID HARE TRAINING COLLEGE, CALCUTTA

The first step to establish a Training College in Bengal was taken as late as in 1906, the suggestion for it having been made by Mr. H. R. James, the then Principal of the Presidency College, Calcutta. The voice of the late Sir Ashutosh Mukherjee was predominant in the formulation of a practical scheme and the Calcutta University drafted, in 1907, the courses of studies for a Degree Course (B.T.) for graduates and Licentiate Course (L.T.) for undergraduates, each extending over one academic year. The Government of Bengal at last decided to establish a Training College, the result being the birth of the *David Hare Training College* which was very felicitiously christened after David Hare, the Scotch philanthropist and a true friend of India, particularly of Bengal. The College was opened in July 1908, in Albert Hall, opposite the Presidency College Buildings, in a rented building. There was no opening ceremony. Mr. W. E. Griffith was the first Principal of the College and in the first session the teaching staff consisted of two other members, viz. Prof. H. Armstead and Prof. Thicket who, soon afterwards, left the College to join as Principal, Patna Training College. Admission was limited to twenty students only in the first session and was restricted mainly to teachers in Government schools. Two seats were reserved for private candidates, one of whom was Sri Monoranjan Mitra, who has since retired as the Principal of the College.

The College had no Demonstration School until 1928. The Hindu and the Hare Schools (then under the able Headmastership of Rai Rasamaya Mitra Bahadur and Sri Ishan Chandra Ghose respectively) were the only institutions that were used as Practising Schools. The Hostel of the College was also located in a rented building and the social life of the College was restricted to occasional debates only. The College continued to be in the Albert Hall Buildings till 1920 when it was shifted to the Lohia Buildings where it functioned till June 1926. It was finally shifted to its own and present premises at 25/3, Ballygunge Circular Road in July 1926. The Demonstration School of the College, the Ballygunge Government

High School, was opened just across the street in January 1928. His Excellency Lord Lytton performed the opening ceremony on this occasion. With this transfer, the social life of the College, now a residential institution with a magnificent Hostel (one of the best in India) improved immensely. It was, moreover, the only Training institution in this part of Bengal even so late as 1940 when the Calcutta University opened its Teachers' Training Department.*

The College went on fairly smoothly till the end of 1941. During the Second World War, it was closed indefinitely under orders of the Government of Bengal (April 1942). After a period of suspension for two full academic sessions, the College reopened on the initiative of Dr. W. A. Jenkins, the then D.P.I., Bengal, in August 1944 at Hooghly in a portion of the Hooghly Training School buildings where it functioned for two more academic sessions (1944-46). It was only in June 1946 that the College was brought back to its own surroundings.

A notable feature of the post-war period is that the College has been thrown open to women students with effect from the session 1946-47 and residential accommodation for the women under training is also provided in the Women's Hostel of the College.

Some of the noteworthy features of the College are enumerated below : —

(*a*) Admission of a larger number of men and women candidates to the College and thereby increasing the facilities for training of secondary school teachers. The number has increased from sixty to one hundred and sixty.

(*b*) Training in craft work (introduced at this College with effect from 1947-48) on a compulsory basis.

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* Before the establishment of the Dacca Teachers' Training College in 1911, the jurisdiction of the College was very wide and extended to the whole of Bengal and Assam. Since the establishment of the Teachers' Training College at Dacca for the purpose of recruiting aided and Government school teachers, its jurisdiction shrank to the Presidency and Burdwan Divisions only.

(*c*) Opening up of facilities for military training to the selected students of this College under the auspices of the Calcutta University Training Corps.

(*d*) Institution of a College Re-Union with an Educational Exhibition running for 10 days and interesting extension lectures for the public.

(*e*) Arrangement for the publication of the College Bulletin every year.

(*f*) A Psychological Bureau and a Pedagogical Institute.

17. THE CUTTACK TRAINING COLLEGE, ORISSA

(a) *Introduction* : The Cuttack Training College was opened on the 11th July 1923, as an institution for training teachers for high schools. It was under the Patna University upto the year 1943, when the Orissa Province had its own University. Since then, this College is affiliated to the Utkal University and is maintained by the Government of Orissa. Upto the year 1935, the College admitted only 20 candidates for training each year and the staff consisted of the Principal and one professor. After 1935, the strength of the College was raised to 30 and the staff was increased from 2 to 3. During 1949, Government of Orissa was pleased to raise the strength of the College to 50 and that of the staff to 4. At present, the college prepares candidates for the Diploma-in-Education Examination of the Utkal University.

(b) *Administration* : The Principal of the College is the immediate controlling officer of the College and is also the controlling authority of three other institutions, namely, The Ravenshaw Collegiate School, which is the attached practising high school; the Secondary Training School at Keonjhar, which prepares teachers for the Middle schools and the Government Commercial School at Cuttack, which teaches Shorthand and Typewriting.

(c) *Staff* : The staff of the college consists of the Principal and three lecturers. It is peremptory that the Principal should be a degree-holder in Education and he is an officer in Class I of the Orissa Education Service with a pay in the scale of Rs. 300 to Rs. 860. The lecturers are in class II of the Orissa

Education Service with a scale of Rs. 200 to Rs. 700 in the Gazetted rank. The minimum qualification of a college teacher is M.A. or M.Sc. (second class) with Diploma-in-Education or M.Ed. (Second class) or an M.A. or M.Sc. with foreign diploma or a graduate with foreign degree in Education.

(d) *Stipends*: All the fifty students are treated as Government stipendiary candidates and are paid stipends at the rate of Rs. 40 p.m. for men and Rs. 45 p.m. for women students. Women students, if they stay with their parents, are only paid a sum of Rs. 10 p.m. as conveyance allowance. To add to the convenience of students, 15 sets of prescribed books are supplied to them for their use every year and to guard against the possible wear and tear of these costly books and to ensure future supplementation, the students are required to pay Rs. 10 as book-fee for each set. This system of help and encouragement has been continuing ever since the inception of this College.

18. H.H. THE MAHARAJA'S TRAINING COLLEGE, TRIVANDRUM

The Government Normal School, Trivandrum, was founded in the year 1895. Teachers who have passed the F.A., Matriculation or Vernacular Examination were trained in this institution till 1911 in which year the Normal School was converted into a Teachers' College. From that date, both graduates and undergraduates are being trained in this Institution. The undergraduate section was abolished from the beginning of the academic year 1946-47.

From the year 1934-35, the strength of the L.T. Section was raised from 50 to 80. With the abolition of the undergraduate section, this number has been raised to 120. Owing to the demand for trained teachers during recent years, the strength has been temporarily increased to 145. Private students not employed as teachers in recognised schools in the State are also admitted on condition that their numbers in each year should not be so large as to shut out the chances of untrained graduates in Departmental and private schools. Only those

who have obtained at least a second class in B.A. Degree Examination are admitted as non-stipendiaries.

The Silver Jubilee of the College was celebrated on the 8th and 9th April 1937. The College has attached to it a Model School containing Classes I to V and Forms I-VI.

The graduates are prepared for the B.T. Degree Examination of the Travancore University and the course of study is for a period of one academic year. Besides the theory and Practice of Education which is compulsory for all the students, they have to select two optionals in the teaching of Mathematics, Physical Science, Natural Science, History, Geography, English and Malayalam. The College also imparts instruction in Physical Training, Arts and Crafts. Students are given training in all games conducted in Secondary schools. Arts and Crafts consist of wood-work, card-board work, drawing and design, etc. Besides the theoretical course, the students are given practical training for about 3 months in the local High Schools. Observation, Criticism and Model lesson classes are also conducted for the B.T. Students. Library work consisting of supervised reading and independent work is done according to the plan chalked out in the lectures by those in charge of the various subjects. At the end of the course of training College Diplomas are issued to the students showing details of their work in the College during the term.

No research work is being done in this Training College.

19. UNIVERSITY TRAINING COLLEGE, NAGPUR

A very large number of pupils in the High Schools in this Province are receiving education at the hands of teachers who have not received any professional training in the art and science of education. The Spence Training College (now Prantiya Shikshan Mahavidyalaya) at Jubbulpore which was, for a long time, the only institution in the Province for the training of high school and middle school teachers closed the B.T. class in 1942 as a War measure. This decision was very unfortunate, and with a view to improving the situation, the Nagpur University pressed the Government to reopen the B.T. classes ; but when, after waiting for three years, there was still

no definite assurance from the Government to that effect, the University, under the able guidance of the Ex-Vice-Chancellor, Hon'ble Shri Puranik, opened this College on the 2nd July 1945.

The number of students trained during the last four years is given below:

Year	No. of Students		Total
	Males	Females	
1945-46	59	26	85
1946-47	44	18	62
1947-48	54	18	72
1948-49	36	34	70.
1949-50	53	32	85

The Training College is housed at present in the building of the Law College, Nagpur. The accommodation is very insufficient and has, to a large extent, been a serious handicap to its development.

Since 1947-48 the University is offering a stipend of Rs. 50 per month for nine months each to the pupil teachers of this College provided they are *bona fide* residents of this Province. They have to give an undertaking to serve as teachers for 2 years in this province after their training is over. These stipends have been made possible on account of the grant given to the University by the Government since 1947-48.

About 20 local schools have volunteered to serve as practising schools for the pupil teachers studying in this College, so that the absence of a Model School is not a handicap.

The staff of the College consisted, in the beginning, of one Principal and five lecturers, but is now increased to one Principal and nine lecturers besides one P.T. Instructor. The College imparts instruction in all the papers prescribed for the B.T. examination of the Nagpur University. It also provides additional short courses in Mental Hygiene, Phonetics and Educational Administration. Moreover, every student gets training in a third subject in addition to the two special subjects he has to offer for his examination. Tutorials, seminars, debates, essays, and case studies are regular features of the course. The College also conducts four societies for the

benefit of the students : an Art Society, a Musical Society, a Dramatic Society and a Literary Society.

The College also conducts classes for the benefit of students preparing for the M.Ed. Examination of the University. These classes are held in the evening to enable teachers in service to attend them.

Every year the College arranges an educational exhibition of the work of its own pupil-teachers and of teachers in the local institutions. Among the extra-activities of the College may be mentioned " The Educator " a quarterly journal conducted by the staff of this College in co-operation with other educationists.

Consequent on the decision of the Nagpur University to introduce Marathi and Hindi as media in the colleges of this Province, this College has started instruction through both Hindi and Marathi. This is a new experiment ; but the members of the staff are enthusiastic about it and are making every possible effort to make it a success.

20. ISABELLA THOBURN COLLEGE, LUCKNOW

Isabella Thoburn College is maintained by the Women's Division of the Mission Board of the Methodist Church in America, with the co-operation of the Presbyterian Mission Board. The College is named after the founder, Miss Isabella Thoburn, who opened the first school for girls in Lucknow in 1870 in a room in Aminabad Bazar, with six students. In 1883, the first high school class appeared for the Government Examination and in 1886, the school was raised to college grade, students taking the Calcutta University examinations until 1895, when affiliation with the Allahabad University was sanctioned. When the Lucknow University was established in 1921 Isabella Thoburn College became the women's college of the University, which it has remained ever since. As such it maintains teaching for the B.A. and B.Sc. degrees, and provides a graduate training course for which the Lucknow University grants a Licentiate of Teaching Degree. Five members of the Staff are readers and eleven lecturers of the University.

A teachers' training class for the English Teachers' Certificate (E.T.C.) was started by Miss Thoburn in 1896, and was recognized by Government. In 1937, this was changed to the Intermediate Teacher's Certificate, when a combined course of Intermediate subjects and methods of teaching was offered. This course was recognized by the High School and Intermediate Board of Education. It is now being discontinued.

In 1923, the College moved from Lal Bagh, where it had grown up with the High School, to spacious grounds of over thirty acres located within half a mile of the University office. There are seven large modern buildings and the Chapel, all erected since 1922, providing accommodation for 194 resident students, and classrooms and laboratories for Intermediate and University women students.

21. S.M.T.T. COLLEGE, KOLHAPUR

(a) *History of the College*: Shree Maharani Tarabai Teachers' College owes its foundation to the generous desire of His Highness the Chhatrapati Rajaram Maharajasaheb of Kolhapur to meet the pressing need of training secondary teachers in the presidency. It was opened in June 1934. It was fortunate enough to secure affiliation to the University of Bombay from its very start. It was permitted to admit 75 students in the first year; but has, since June 1935 been permitted to admit 100 students. Before the opening of this college, there were very meagre facilities for training secondary teachers in Indian States, and hence students flocked to this college from distant States like Kashmir in the north to Travancore in the south. So far 1,139 teachers have been trained and are working in the various parts of the country.

(b) *Special Activities of the College*: The College has conducted and is still conducting several special activities among which the following may be mentioned:—

(i) *Physical Instructors' Class*: Right from the year 1937 upto 1947, every year facilities for physical education (similar to the short-term course at Kandivli) were offered to College students through a special class organised by the College. So far, about 500 teachers have been trained.

(ii) From 1944 onwards, classes for training primary teachers and S.T.C. candidates were organised by the College and the staff participated in the work. So far, about 130 local primary teachers have been trained. After the merging of the State, however, this work has stopped.

(iii) *Social Service*: This year a new line of work has been chalked out in social service. Members of the staff and students co-operated with the local Municipal authorities in organising their programme of *Harijan Din.* Plans are now being worked to organise social education in rural centres round about Kolhapur.

(c) *Research Work*: Professors and students have engaged themselves in research work and have carried out several pieces of research. This year the change of College affiliation to Poona University caused some delay in gaining recognition for teachers of post-graduate research. Now that the Principal is recognised as a Post-graduate Teacher this work will be taken up again.

22. THE TEACHERS' TRAINING COLLEGE, BIKANER

The Teachers' Training College, Bikaner, was affiliated to the Rajputana Board early in 1946 and the College started functioning in the same year. It imparts training to its teachers *free of charge.* It even provides an allowance for those who are *deputed* to it.

" The principal inaugurated the College ", writes Mr. C. P. Sharma, the Principal, " on 5th September 1946 with a table and chair borrowed from the Head Master, T.T. School ". The staff and the students came in a little later and it was only by the first week of October that the college began to function at full speed.

The College is, as yet, an infant institution but, given the necessary funds and assistance, it is likely to develop into a very useful institution.

23. THE SECONDARY TRAINING COLLEGE, BOMBAY

(*a*) The following *chronological notes* will throw light on the history of the College :—

1906 – Birth of the College.

Object: To supply trained teachers to Government High Schools and Middle Schools.

Venue : Elphinstone High School Building.

Staff :—Principal Mr. J. N. Fraser.
Vice-Principal—Mr. D. H. Vachha.

Student strength : 17 Graduate teachers.
12 Undergraduate teachers.

Diploma : Secondary Training College Diploma (S.T.C.D.) The College year began in January and ended in September. The Curriculum was provisional and was subject to modification in the light of experience. The Principal and Vice-Principal also delivered public lectures which were thrown open to teachers belonging to schools in Bombay.

1909–10—Mr. P. C. Wren acted as the Principal, in the absence of Mr. Fraser. It was at this time that the Direct Method of Teaching English was introduced.

1911 – A new system of admissions came into practice. Five stipendiaries were selected by the staff and the rest of the students were deputed by the D.P.I. of the Province.

1913 – Mr. P. C. Wren again acted as the Principal. A hostel for 20 students was opened in June 1913.

1916 – By this year, the College had trained 316 teachers, of whom 18 came from aided schools, 15 from Indian States, and 5 were women.

1918 – The year witnessed the death of Mr. J. N. Fraser.

1920 – The College was affiliated to the University of Bombay, for the degree of B.T.

Staff — 1 Principal — in I.E.S.

One Professor and two Lecturers	in B.E.S.
One Asst. Lecturer	in S.E.S.

Mr. H. R. Hamley was the first Principal under this Scheme. Mr. P. S. Katti (Principal of the Elphinstone High School) became the Vice-Principal. The College also became the headquarters of the newly started Bombay Teachers' Union.

1923 – The first batch of B.T. students was admitted. The examination in Part I (theory) was to be held immediately after the year of training. Examination in Part II (practical) was to be held one year after.

1924 – A course of lectures by the College Staff for students (teachers) appearing for the S.T.C. Examination was instituted.

1925–26—Ten stipends of Rs. 30 each were awarded to non-Government teachers. (This year 30 non-Government teachers were under training.)

1927–28—The strength of the College was raised to 60.

1929 – The B.T. Syllabus was revised, and it was decided to hold both the parts of the B.T. Examination after the expiration of the academic year, except in the case of freshers, who could take Part II, only after one more year.

1931–32—The strength of the College was raised to 75.

1932–33—The strength of the College was further raised to 100. 'The composition of the staff was as follow :—

1 Principal—(I.E.S.)

2 Professors—(B.E.S. I)

5 Lecturers—(B.E.S. II)

2 Asst. Lecturers—(B.E.S. III)

1936 – This year witnessed the first experiment in farming out students to the City Schools for practice. Only 25 women students, as a rule, were farmed out at this stage.

1937 – Specialisation in the Teaching of Marathi, Gujarati, Urdu and Persian was introduced.

The College began registering students for the M.Ed. degree, and seven students were registered this year.

1938 – Till now, students had to specialise in the teaching of three subjects, out of which English was to be one, compulsorily. This year it was decided to reduce the number of special subjects to two. The compulsion regarding English was taken off.

1939 – From this year onwards, the number of women students definitely increased—the proportion of men and women teachers being 50 : 50.

Another Government Training College was opened at Belgaum and

(i) Tuition Fees at the rate of Rs. 120 per term (in the case of teachers possessing a domicile within the Province) were charged for the first time; A fee of Rs. 175 per term was charged to students from Indian States and outside the Province.

(ii) One B.E.S. Class I post was transferred to the Belgaum College, and in its place a B.E.S. II post was substituted.

1942 – The Elphinstone High School began taking a "Technical" shape and no longer remained useful as a Practising School. As a result of this, more and more students were farmed out to the City Schools, and serious problems connected with organisation began to arise. At about the same time, the College lost its permanent home, in the first instance, for purposes of the A.R.P., and later, to make room for a Naval Hospital. The College also lost its Hostel

and the Principal's quarters, the entire compound being handed over to the Motor Vehicle Department.

1944 - A Fellowship worth Rs. 50 per month was instituted at the College. However, it remained mostly vacant.

1946 - The permanent home of the College was restored to it, but not the Hostel.

1950 - The hostel, along with the Principal's bungalow, were returned to the College.

(*b*) The following are the statistics of students :—

Year	No. on roll	Left	Failed	Passed
1906	33			
1911	32			
1915	34			
1921-22	34	2	3	29
1926-27	50	5	1	44
1927-28	60	2	2	56
1931-32	75	1	1	73
1933-34	100	3	0	97
1936-37	100	6	3	91
1941-42	103	2	0	101
1946-47	98	7	3	88
1949-50	99	2	7	90

ITEM No. 3 OF THE AGENDA

THE INDIAN COUNCIL OF TEACHER EDUCATION

(A draft Constitution)

Chapter I—INTRODUCTORY

1. The *name* of the Association shall be "The Indian Council of Teacher Education".

2. Its *registered office* shall be at

3. The *aims and objects* of the Council shall be as under :—

(*a*) To hold periodical conferences of training colleges in India and such other conferences as it may deem necessary from time to time ;

(*b*) To co-ordinate the work of training colleges in India ;

(*c*) To bring out an annual giving a brief account of the activities of each member institution ;

(*d*) To plan, promote, and co-ordinate educational research in India ;

(*e*) To organise research on problems connected with teacher education and publish books, pamphlets, and films on the same ;

(*f*) To strive to improve the qualifications, status, and economic condition of the teachers ; and

(*g*) Generally to take all such steps as will tend to improve the status of teachers in general and of their education in particular.

Chapter II—MEMBERSHIP

4. The *membership* of the Council will be as under :—

(*a*) All Education Departments of Indian Universities ;

(*b*) All Training Colleges affiliated to Indian Universities ;

(*c*) All colleges affiliated to Indian Universities which conduct some course of teacher-training;

(*d*) All training colleges which prepare teachers for the middle schools;

(*e*) All associations of training colleges for primary and pre-primary teachers;

(*f*) Persons who are serving on the staff of a training institution for teachers of any type or who have retired after at least five years of service in a training institution; and

(*h*) Persons who are not qualified to be members under sub-clause (*f*) but whose membership has been approved by the Executive Committee on the ground that it will help the cause of Teacher education.

5. The *membership fee* shall be Rs. 10 per annum for members of classes (*a*) to (*e*) and Rs. 3 per annum for members of class (*f*). There shall be no fee to persons who have been admitted under class (*h*). All fees shall be payable in advance for each year in the month of January.

Chapter III—ADMINISTRATION

6. The General Body of the Council shall consist of—

(1) One representative of every institution which has enrolled itself as a member under Rule 4 (*a*) to 4 (*e*) and paid the fee prescribed under Rule 5;

(2) Every person who has enrolled himself as a member of the Council under Rule 4 (*f*) and paid the fee prescribed under Rule 5; and

(3) Every person admitted to membership under Rule 4 (*h*).

7. The General Body, at its Triennial General Meeting, shall

(*a*) consider and adopt the triennial report with the audited statement of accounts;

(*b*) elect the members to form the Executive Committee as well as the President, Vice-President, and the Joint Secretaries for the ensuing three years;

(*c*) appoint an auditor or auditors for the ensuing three years ;

(*d*) consider any amendment to the Bye-laws and Rules of the Council of which due notice has been given ;

(*e*) consider questions of general policy affecting teacher education ; and

(*f*) consider, with the consent of the majority of members present and of the Chairman of the Meeting, questions of immediate importance to the Council but not affecting its constitution.

N.B. The Executive Committee shall have power to fix the dates of the Triennial General Meeting.

8. Special meetings of the General Body may be convened by the Executive Committee at any time.

9. Three clear months' notice shall be required for all meetings of the General Body.

10. The President of the Council shall preside over the meetings of the General Body. In his absence, the Vice-President shall preside. If none of these office-bearers are present, the members present at the meeting shall elect a chairman for the meeting.

11. The quorum for a meeting of the General Body shall be one-third of the total number of members or 15, whichever is less. If there be no quorum within half an hour of the time fixed for the meeting of the General Body, the meeting shall stand adjourned to the same hour on the next day. No notice of such adjourned meeting shall be necessary.

12. The Executive Committee shall consist of twelve members as mentioned below : —

(1) President.

(2) Vice-President.

(3)
(4)
(5)
(6) } Representatives of Institutions referred to in Rule 4(*a*) and 4(*b*).

(7) } Representatives of Institutions referred to in Rule
(8) } 4(*c*) and 4(*d*).

(9) } Representatives of Individuals referred to in Rule
(10) } 4(*e*) and 4(*f*).

(11) } Joint Honorary Secretaries.
(12) }

13. The Executive Committee shall be elected as under :—

(*a*) The whole committee shall be elected at the Triennial General Meeting.

(*b*) The President, Vice-President and the two Secretaries shall hold office for three years.

(*c*) Out of the remaining 8 members, 4 members (as decided by lot) shall retire at the end of the first year ; and the remaining four at the end of the second year.

(*d*) The vacancies caused by retirement of members under sub-rule (*c*) above shall be filled up by election held in such manner as the Executive Committee may decide. The retiring members shall be eligible for re-election.

14. The business before the Executive Committee shall ordinarily be disposed off by circulation of papers.

15. Meetings of the Executive Committee shall be convened by any one of the Secretaries as and when necessary, but at least once a year. A meeting shall be convened if five members requisition it, within 15 days of the receipt of the requisition. Five members shall form a quorum. 21 clear days' notice shall be required for meetings of the Executive Committee.

16. If a meeting of the Executive Committee is adjourned for want of quorum, the business at the adjourned meeting shall be transacted even if no quorum is present.

17. The Executive Committee shall take all steps necessary to carry on the work and administration of the Council in accordance with the programme and the budget sanctioned by the General Body.

18. The Executive Committee may proceed to business notwithstanding any vacancies due to any cause.

19. The Executive Committee shall have power to fill up all vacancies among the office-bearers or in the Executive Committee by co-option and election (in the case of vacancies under rule 13).

20. All questions at the meeting of the General Body or the Executive Committee shall be decided by the majority of votes of the members present and voting. In case of an equality of votes, the presiding authority shall have a second or a casting vote.

21. The Secretaries of the Council shall be responsible for the conduct of the administration of the Council in accordance with resolutions of the General Body and the Executive Committee.

22. All funds of the Council shall be deposited in such bank as may be approved by the Executive Committee and shall stand in the name of *The Indian Council of Teacher Education.* The account shall be operated upon by the Chairman or any other member authorised by the Executive Committee in this behalf or by any one of the Secretaries.

23. At least two months' notice shall be given of every amendment proposed to the constitution of the Council and the proposed amendment, along with the opinion of the Executive Committee thereon, shall be circulated to all members of the General Body and shall be specifically included in the agenda of the meeting.

24. The Executive Committee may delegate any of its powers to the President, Vice-President, or the Secretaries.

25. All matters not specifically provided for in this Constitution shall be decided upon by the President in consultation with the Executive Committee. But intimation of all such decisions shall be given to all members and they shall be laid before the next Triennial Meeting for confirmation.

MADHURI R. SHAH
Organising Secretary.

Supplementary Agenda No. 1

The following additional items suggested by *Shri R. V. Parulekar* have been included in the agenda with the permission of the President :—

7. *The observations made by the Radhakrishnan Commission regarding the training of teachers, post-graduate teaching and research in education, and such other allied matters.*

8. *The problem of the medium of instruction with special reference to training colleges.*

9. *The problem of evolving a common terminology for the writing of books in Indian languages on educational subjects.*

10. *A review of the existing educational journals in India and the manner in which the training colleges may co-ordinate their efforts either* (a) *to improve the existing magazines or* (b) *to organise the new specialised magazines that are badly needed.*

11. *The ways and means in which the training colleges can help to produce, on a planned basis, the necessary literature regarding the problems of Indian education in English, Hindi, and other Indian languages.*

12. *The manner in which the training colleges in India may facilitate the pursuit of educational research by co-ordinating their library facilities.*

Comments on these items are invited from all the delegates.

MADHURI R. SHAH

Organising Secretary.

ITEM No. 5(a) ON THE AGENDA

ORDINANCES AND REGULATIONS OF INDIAN UNIVERSITIES FOR THE MASTER OF EDUCATION (M.Ed.) EXAMINATION

1. *Provision of the M.Ed. course*: Courses for this degree are provided only in the following 16 universities :—

(1) Aligarh	(7) Delhi	(12) Nagpur
(2) Allahabad	(8) Karnatak	(13) Osmania
(3) Andhra	(9) Lucknow	(14) Patna
(4) Banaras	(10) Madras	(15) Poona
(5) Baroda	(11) Mysore	(16) Saugor
(6) Bombay		

These courses have been enumerated in the following paragraphs.

2. *Aligarh*: The University of Aligarh provides for M.Ed. (by thesis) only. Its regulations on the subject are given below :—

1. A student who has been admitted to the Degree of Bachelor of Teaching *in the first or second division* in the University or to similar degrees in a recognised University shall be permitted to proceed to the Degree of Master of Education provided that he

(*a*) has pursued a course of Advanced Study and Research for a minimum period of *one academic year* under the guidance of the Department of Education;

(*b*) has submitted a Thesis on a subject approved by the Department embodying the results either of (i) a critical analysis of existing data or (ii) original research or (iii) a combination of these; and

(c) has produced a certificate of good character from the Provost of the Hall and paid the prescribed fees.

2. Every candidate shall, besides, submitting a thesis, undergo a *Viva Voce* Examination and shall, if required, also satisfy the examiners in a written examination on the subject of his research.

3. The Thesis shall be examined and the *Viva Voce* Examination shall be conducted by a Board of Examiners consisting of an internal examiner and one person not engaged in teaching in the University.

4. Four hundred marks shall be allotted to the Thesis and 100 to the *Viva Voce* Examination.

The names of the successful candidates shall be arranged in the following three classes according to the marks they have obtained. The names in the I Class shall be arranged in order of merit: —

Class I—60 per cent or more of the total marks

Class II—48 per cent or more of the total marks

Class III—36 per cent or more of the total marks.

5. If the Thesis is referred back by the Board of Examiners, it may be re-submitted by the candidate after due revision under the guidance of the Department after a period of not less than 6 months and within 2 years of the date on which it was first referred back, provided that the candidate enrolls himself as an Ex-student according to the rules laid down in Chapter XV of the Academic Regulations.

6. The combination of law will not be permitted with the Course of M.Ed. *

3. *Allahabad University*: The Allahabad University provides for an M.Ed. degree (partly by papers and partly by thesis). It is also possible to get the M.Ed. degree entirely by thesis if (*a*) the candidate has good published research work to his credit and has put in residence at the University for a year or more.

The M.Ed. course, as prescribed at present, consists of four groups—A, B, C and D, of which only group A is actually taught. The regulations for this are given below: —

1. The Examination for the Degree of Master of Education shall be open to a candidate who has after graduation passed the B.Ed., B.T., or L.T. Examination or an equivalent examination held by a Provincial Government or by any University in India recognised by the law of the place in which it is situated or of any University or body which the Academic Council may from time to time recognise for this purpose, and has pursued for one session the prescribed course of study at the University.

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* *Vide* Chapter XVIII-A of the University Ordinances, pp. 112-4 of Calendar for 1948.

2. The Course of Study for the M.Ed. Examination shall be confined to one of the following groups:—

Group A.—Advanced study in Education.

Group B.—Study and investigation in Experimental and Applied Education.

Group C.—Study and investigation in Educational Administration, Organisation and Survey.

Group D.—Such other Advanced and specialised courses as may be prescribed from time to time.

3. The examination in Group A—Advanced Study in Education—shall consist of,

Paper I—Philosophy of Education (including the History and Evolution of Educational Theories).

Paper II—Advanced Educational Psychology and Experimental Education.

Paper III—Comparative Education.

Paper IV—Psychology of Childhood and Adolescence (with emphasis on the mentally retarded and gifted children).

Paper V—Any one of the following:—

(1) University Education.

(2) Basic and Higher Secondary Education.

(3) Pre-Basic Education.

(4) Vocational Guidance and Selection.

(5) Educational Sociology.

(6) Mental Hygiene and Child Guidance.

(7) Moral and Religious Education.

Viva Voce.

4. Candidates shall be required to satisfy the *Viva* Board that as far as possible they have supplemented class lectures by field work or work in the Laboratory.

5. A candidate who has attended a regular course of study for one session in the University and has either failed to appear or failed to pass may be allowed to appear at the M.Ed. Examination of any subsequent year without attending a further regular course of study.

6. A candidate for M.Ed., who satisfied the requirements of clause 1 of the Ordinances and who can produce evidence of capacity for

research may, on the recommendation of the Head of the Department, be permitted to submit a thesis in lieu of the written examination. Such a candidate will be required to spend at least one year in research work.

7. Every candidate supplicating for the M.Ed. Degree by thesis will be required to present himself for a *viva voce* test.

8. The candidate shall select the subject of his thesis at the time of his admission to the M.Ed. class in consultation with the Head of the Department.

9. The candidate shall pursue his investigation at Allahabad under the supervision of the Head of the Department or of a member of the staff to whom the candidate may be assigned by the Head. If, however, it is in the interest of his investigation that the candidate should work elsewhere, the Vice-Chancellor may, on the recommendation of the Head of the Department, give him leave of absence for not more than six months.

10. On the completion of his research work the candidate shall submit three printed or type-written copies of his thesis.

The *standard for passing* the examination is laid down as follows:—

Each paper in Group A	100 marks
Viva Voce	100

Minimum pass marks—	30 per cent of the aggregate.
First Class	60 per cent of the aggregate.
Second Class	48 per cent of the aggregate.

4. *Andhra*: The University of Andhra provides for M.Ed. (by thesis) only. Its regulations on the subject are given below:—

1. The Degree of Master of Education may be conferred upon:—

(1) persons who have passed the B.Ed. Degree Examination of this University and who are of not less than two years' standing;

(2) persons who are residents of or domiciled in the University area and who have passed an examination recognised by the Academic Council as equivalent to the B.Ed. Degree Examination of this University and who are of not less than two years' standing.

If any question arises as to whether a person coming under class (2) above, is a resident of or domiciled in the University area or not, the question shall be decided by the Syndicate and its decision shall be final, provided that a candidate will not be considered as domiciled

unless he has lived continuously within the University area for a period of not less than 2 years immediately preceding the date of submission of the thesis.

2. The M.Ed. Degree shall only be awarded to candidates who have submitted as a thesis, work forming a distinct contribution to the advancement of learning. Each candidate shall state in his application the subject or subjects within the purview of the Regulations for the Degree of Bachelor of Education, upon a special knowledge of which he rests his application for M.Ed. Degree, and shall with the application transmit three copies, printed or type-written, of the thesis.

The application and thesis should be forwarded so as to reach the Registrar between 1st June and 1st July of any year.

The thesis must comply with the following conditions:—

(1) It must be satisfactory in respect of literary representation as well as in other respects and should be in a form suitable for publication;

(2) the candidate shall indicate generally in his preface to his thesis and specially in notes, the sources from which his information is taken, the extent to which he has availed himself of the work of others and the portions of the thesis which he claims as his original work;

(3) he shall further state whether his research has been conducted independently, under advice or in co-operation and in what respects his investigations or researches appear to him to tend to the advancement of learning.

4. The thesis shall be referred to three independent judges appointed by the Syndicate who shall examine the thesis, who may examine the candidate orally if they so desire and who shall report individually whether the candidate's work is of sufficient merit to deserve the Degree.

In the Syndicate, upon the independent reports of the judges, considers the candidate worthy of the Degree of Master of Education, it shall cause his name to be published with the subject of his thesis.

5. Every candidate shall be at liberty to publish his thesis. The thesis of any successful candidate may be published by the University with the inscription—"Thesis approved for the Degree of Master of Education in the Andhra University".

5. *Banaras University*: The University of Banaras provides for M.Ed. (by thesis) as well as for M.Ed. (by papers). Its regulations on the subject are given below:—

1. The examination for the degree of Master of Education shall be held once a year at Banaras, at such time and on such date as the Syndicate may prescribe.

2. The examination for the degree of Master of Education shall be open to a candidate who has (i) after graduation passed the B.Ed., B.T. or L.T. Examination or an equivalent examination held by a Provincial Government or by any university in India recognised by the law of the place in which it is situated or of any university or body which the Syndicate may from time to time recognise for this purpose, and (ii) has pursued for one session the prescribed course of study at the University.

3. The course of study for the M.Ed. Examination shall be confined to *either* an Advanced Study in Education *or* writing of a thesis in a subject approved by the Head of the Department of Education in the University.

4. The Examination in the Advanced study in Education shall consist of—

Paper I—Educational Philosophy and Theory.

Paper II—Educational Psychology and Statistics.

Paper III—History of Indian Education.

Paper IV—A Comparative Study of the Methods, Practices and Systems of some of the Advanced Countries of the World.

Paper V—Any *one* of the following :—

(i) Experimental Education.

(ii) Vocational and Educational Guidance.

(iii) Basic Education.

(iv) Adult Education.

(v) Educational Administration and Supervision.

5. Candidates offering a thesis shall do so in a subject approved by the Head of the Department of Education in the University. The thesis shall be prepared under the direction of a member of this Department and submitted on or before the date fixed for its submission by the Syndicate of the University.

6. The thesis shall be the candidate's own work embodying his critical analysis of existing data or a record of his original investigation. The candidate shall indicate generally in his preface to his thesis the sources from which his information is taken, the extent to which he has availed himself of the work of others and the portion of his thesis which he claims as his original work.

7. The candidate shall pursue his investigation at Banaras under the supervision of the Head of the Department or of a member of the staff to whom the candidate may be assigned by the Head. If, however, it is in the interest of his investigation that the candidate should work elsewhere, the Vice-Chancellor may, on the recommendation of the

Head of the Department, give him leave of absence for not more than six months.

8. The thesis must be satisfactory in respect of literary presentation as well as in other respects and should be in a form suitable for publication. It should be accompanied by a declaration that the thesis has not been previously submitted by him for a degree of any University. The candidate shall submit three printed or type-written copies of his thesis.

9. The thesis will be referred to a Board of Examiners consisting of two External and one Internal Examiner who will examine the thesis and also conduct a *viva voce* on the subject of the thesis. They will report individually whether the candidate's work is of sufficient merit to entitle him to obtain the Degree of Master of Education.

10. A candidate shall apply to the Registrar in such form as the Syndicate may prescribe. His application and fee shall be despatched through the proper channel so as to reach the Registrar at least four weeks before the commencement of the examination.

11. Failure to pass or appear at the examination shall not disqualify the candidate from presenting himself at any subsequent examination on a new application being forwarded and a further fee paid. Such a candidate shall not be required to prosecute a further course of study in the University or in a constituent College.

In case of failure of a candidate who has offered a thesis, he will be required to re-cast or re-write the same thesis or write a new one under the guidance of the members of the Department of Education, according to the directions of the Board of Examiners.

PAPER I

EDUCATIONAL PHILOSOPHY AND THEORY

I. Bases of Education:

(i) The Biological Basis.

(ii) The Psychological Basis.

(iii) The Ethical Basis.

(iv) Sociological Basis.

II. The Various Schools of Moral Philosophy: Idealism, Realism, Pragmatism, Naturalism, Humanism.

III. Schools of Social Philosophy—Individualism, Socialism, Communism, Nationalism.

IV. Values in Education.

V. Aims of Education and their critical evaluation—

Culture as the aim.

Character.

Formal training.

Development of individuality.

Preparation for life.

Complete living.

Education as self-realisation.

Education as growth.

VI. The democratic ideal and the socialistic ideal of Education: The nationalistic ideal of Education.

VII. Foundations of Methods: Nature of Method—Its relation to (i) Matter and (ii) Child.

VIII. Principles of curriculum-making: Experience as basis; Subject as basis; Psychological, Sociological, and Ethical considerations. Didactic formalism and didactic materialism in education. Integration of curricula; Pre-vocational and vocational training.

IX. Study of curriculum in relation to social ideals—

(i) Curriculum in England, America, Russia and India.

(ii) Proper curriculum for Indian conditions.

X. Discipline in Education:

Various theories of punishment (discipline and government).

The Basis of the doctrine of true discipline.

Discipline in relation to character-making.

Interest and discipline.

School organisation and discipline.

Method and discipline.

XI. Moral and Religious Training: Their Aims and Methods.

XII. Comparative Study of European and Ancient Indian Ideals.

Books for Intensive Study:

Rusk: Philosophic Bases of Education.

Ross: Groundwork of Educational Theory.

Pinset: Principles of Teaching Method.

Davis: The Matter and Method of Modern Teaching.

Pinkevitch: The New Education in Soviet Russia—Part II.

John Dewey: Democracy and Education.

Finney: A Sociological Philosophy of Education.

Books recommended for further Study:

Horne, H. H.: The Philosophy of Education.
Thompson: Modern Philosophy of Education.
Kilpatrick: Source Book in the Philosophy of Education.
Gentile: The Reforms of Education.
Eucken: Main Currents of Modern Thought.
Buchner: The Educational Theory of Immanuel Kant.
Turnball: The Educational Theory of J. G. Fichte.
Luqueer: Hegel as Educator.
Plato: Republic.
Cohen and Travers: Educating for Democracy.
Kilpatrick: Education for a Changing Civilization.
Dewey: Experience and Education.
Bagley: Determinism in Education.
Bode: Modern Educational Theories.
Spencer: Education.

PAPER II

EDUCATIONAL PSYCHOLOGY AND STATISTICS

A. *Psychology of*:

(i) Normal, (ii) Backward, and (iii) Superior Children.

(i) *Normal Child*: Methods of Child Psychology. Perceptual development of the child. Language. Attention and interest, imagination. Children's lies and make-belief. Learning. Habit-formation. Heredity and environment. Transfer of training and formal discipline. Emotional development and development of sentiments. Conditioned reflex and its application in making and breaking of habits. Social and normal development of the child-instincts and innate tendencies. Play, punishment and reward. Religious development. Self-assertion. Wilfulness, fear, anger, and jealousy in children.

(ii) *Psychology of the subnormal child*: Physical and mental characteristics of the subnormal child. Social madadjustments of the subnormals. Causes, diagnosis and treatment.

(iii) *Psychology of the supernormal child*: Physical, mental and moral characteristics of the supernormal child. Social traits. Identification of the subnormal. Special treatment.

B. *Educational Statistics*:

1. The Problem of interpretation of educational data—Measures in general, Tabulation of scores, Drawing up a frequency distribution, Graphic representation of a frequency distribution, Percentiles.

2. Calculation of mean, median and mode and the use of these measures.

3. Calculation of the various measures of variability—Range, Q.D., A.D., and S.D.—The co-efficient of variability—when to use them.

4. Normal Probability Curve: Meaning and its importance. Measurement of divergence from normality. Causes of deviation of the obtained distribution from the normal form. Sampling and reliability of various measures. Applications of N.P.C. Comparing and combining test scores and distributions.

5. Linear correlation, its calculation and its reliability. Interpretation of correlation. Partial and multiple correlation.

6. Interpretation of educational data.

BOOKS RECOMMENDED

For Intensive Study:

Woodworth: Psychology—A Mental Study.

Browner Angusta: The Psychology and Special Abilities.

Binet and Simon: Mentally Defective Children.

Peter Sandiford: Educational Psychology.

Spearman: Nature of Intelligence and Principles of Cognition.

Garrett: Statistics in Psychology and Education.

For Further Study:

Titchner: Psychology.

McDougall: An Outline of Psychology.

Dumville: Fundamentals of Psychology.

Thomson: Instincts, Intelligence and Character.

Kilpatrick: The Fundamentals of Child Study.

Dewey: How We Think.

Drever: Psychology of Every-day Life.

Allers: The New Psychologies.

McDougall: Energies of Man.

Susan Isaacs: Intellectual Growth in Young Children.

Thorndike: Educational Psychology.

Sturt and Oakden: The Psychology of Education.

Burt: Backward Child.

Schonell: Backwardness in Basic Subjects.

Bentley: Superior Child.

Tredgold: Mental Dificiency.

Huey: Backward and Feeble-minded Children.

H. Woodroe : Brightness and Dullness in Children.

Goddard : Feeble-mindedness.

Vernon : The Measurement of Abilities.

Thurstone : Fundamentals of Statistics.

PAPER III

HISTORY OF INDIAN EDUCATION

A. *Ancient and Medieval* :

(1) Aims and Ideals of Education in vogue in these periods.
(2) Educational Organisation and Finance.
(3) Educational Postulates, Practices and Devices.
(4) Some Educational Centres and Institutions.
(5) Literary, Professional and Vocational Education.
(6) Education of Women.
(7) Permanent Contributions of Ancient Indian Education.

B. *Modern Education* :

1. Education under the East India Company. The part played by the missionaries and other non-official agencies.
2. Macaulay's Minutes of Education and the Decision of 1835. The Despatch of 1854 by Sir Charles Wood. The establishment of the Modern System of Education.
3. Educational Expansion from 1854 to 1882.
4. The Commission of 1882 and its influence on the development of Primary and Secondary Education.

   The establishment of Indian Universities, Universities Act of 1904.
6. The Calcutta University Commission.
7. Interim Report (1929) on Education.
8. The Sargent Scheme of Education.
9. The Problem of Free and Compulsory Primary Education, its history and the Basic System of Education.

C. *Experiments in National Education.*

D. *Special Problems and Schemes and recent trends in Indian Education.*

BOOKS RECOMMENDED

For Internal Study :

S. K. Das : Educational System of the Ancient Hindu.

N. N. Law : Promotion of Learning in India (during Mohammadan Rule).

Nurullah and Naik: History of Education in India.

Paranjape: A Source Book of Modern Indian Education.

For Further Study:

A. S. Altekar: Education in Ancient India.

Venkateshwara: Indian Education through the Ages.

Jaffar: Education in Muslim India.

Ameer Ali: The spirit of Islam.

Mayhew: The Education of India.

Basu: University Education.

Fleming: Zakir Hussain's Reports on Basic National Education.

Varkey: The Wardha Scheme of Education.

Linlithgow Commission Report.

The Calcutta University Commission Report.

Hartog's Auxiliary Report.

PAPER IV

A COMPARATIVE STUDY OF THE MODERN EDUCATIONAL METHODS, PRACTICES AND SYSTEMS OF ANY TWO OF THE FOLLOWING COUNTRIES

1. England.
2. U.S.A.
3. Soviet Russia.
4. China.
5. Japan.
6. Egypt.
7. Turkey.
8. Persia.

BOOKS RECOMMENDED

For Intensive Study:

Monroe: The Text-book in the History of Education.

Kandel: Studies in Comparative Education.

Pinkeveitch: New Education in Soviet Republic.

Graves: A History of Education in the Modern Times.

Graves: A History of Education during the Middle Ages.

Boyd: The History of Western Education.

Adams: Evolution of Educational Theory.

Brereton: Studies in Foreign Education.

The Year Book of Education (Relevant chapters on Education in Foreign countries).

H. C. Dent: The Education Act of 1944.

Peter Sandiford: Comparative Education.

Lowndes: The Silent Social Revolution.

PAPER V

ANY ONE OF THE FOLLOWING

A. *Experimental Education*:

Determination of Central Tendencies—mean, median and mode. Mean and standard deviations. Percentile rank. Co-efficient of correlation. Probable error.

Mental tests, their varieties. Norms. Standardisation of tests. Selection of tests. Construction of tests. Qualification for administration of tests.

Meaning of intelligence. Theories of intelligence. Heredity and intelligence. Intelligence quotient and Mental Age. Intelligence tests, their construction, administration and according.

Achievement tests. Advantages, limitations and scope, their construction, administration and scoring.

Diagnostic and Prognostic tests.

Tests of temperament and character.

Educational tests. Vocational guidance and selection.

Besides lecture work on the above topics, there will be practical work in (*a*) intelligence testing, (*b*) achievement testing, and (*c*) vocational testing.

BOOKS RECOMMENDED

Rugg: Statistical Methods applied to Education.

Spearman: Abilities of Man.

McCall: How to Experiment in Education.

"Psychological Tests of Educable Capacity" by the Board of Education in England.

C. H. Rice: Hindustani Binet Performance Points Scale. Parts I, II and III.

For Further Study:

Garret: Statistics in Education and Psychology.

Thurstone: Fundamentals of Statistics.

Vernon: The Measurement of Abilities.

Monroe The Theory of Educational Measurement.

Ballard: The New Examiner.

Ballard: Group Tests of Intelligence.
Terman and Merill: Measuring Intelligence.
Hawkes: Achievement Examination.
Burt: Mental and Scholastic Tests.

B. *Vocational and Educational Guidance*:

1. The need for Guidance. Vocational and Educational Guidance and selection. The problem of Vocational and Educational Guidance.

2. The study of the child: his home conditions; his physical and mental conditions; his interests, temperament and character.

3. Aptitudes, general and specific: their relation to intelligence. Interest and aptitudes.

4. Vocational motive; aims of vocational choice; principles underlying the choice of the right vocation.

5. The study of occupations; their classification; general and specific descriptions of some important occupations. Job-analysis and Job-profile.

6. The technique of Vocational Guidance. Examination—testing special abilities and aptitudes—old methods—phrenology, physiognomy, the letter of application, photograph, recommendations and testimonials. Interview. Aptitude Tests—Trade Tests—Interest Inventories—Achievement tests as indicators of aptitudes—Guidance Programme.

7. Development and Organisation of Vocational and Educational Guidance in India studied in comparison to that in England, U.S.A. and Russia.

BOOKS RECOMMENDED

Earle: Methods of Choosing a Career.
Neuberg: Principles and Methods of Vocational Choice.
Bingham: Aptitude Testing.
Keller and Viteles: Vocational Guidance throughout the World.

Books for Reference:

Oakley and Macrae: Handbook of Vocational Guidance.
Hollingworth: Vocational Psychology and Character Analysis.
Myers: Principles and Technique of Vocational Guidance.
Abott and Wood Report.
Report of the Industrial Re-organisation Commission, 1934.
W. M. Proctor: Educational and Vocational Guidance.

Sessional work:

Besides Lecture work on the above topics, there will be practical work on the following lines:—

(i) administration of certain vocational tests, and

(ii) case-histories of some eight students regarding the choice of occupations.

C. *Basic Education*:

Study of the following problems:—

I. The place and function of Basic Schools in the total programme of public education.

II. Study of the present-day condition of Basic Schools (both rural and urban) with special reference to stagnation and retardation, elimination, walking distance, buildings and equipments.

III. Organisation of Basic education. Constitution, powers and functions of the Educational Committee, of the District Boards and Municipal Boards. The powers and functions of the inspecting staff of the Government. Finance and control of Basic Education.

IV. Curriculum of the Basic Schools: the courses of Studies at the Primary Basic Schools and Senior Basic Schools. The curriculum in relation to Higher Education and Vocational Education.

V. Training of Teachers for Basic education.

(i) Courses of Study, (ii) Organisation and control of Training Schools, and (iii) Mobile Training Courses.

VI. Introduction of compulsory education. The extent of compulsion introduced.

VII. The means of making it successful.

The curriculum, organisation and administration of Primary Education in England and Russia.

VIII. Psychological study of children in Basic Schools. Individual differences, their mental equipments. Intellectual retardation; mental diseases, abnormalities.

IX. Preparation of mental tests for children of the Basic Schools: The principles underlying the preparation of Intelligence tests, Vocabulary tests and Achievement tests. The administration of these tests.

X. Determination of the progress of Basic Education during the last ten years.

Practical Work :

1. Preparation of mental tests for children of Basic Schools or determination of the distribution of intelligence in the children of rural and urban areas.

2. Psychological study of Basic School children with reference to individual peculiarities.

BOOKS RECOMMENDED

Acharya Narendadeo Committee Report on Primary and Secondary Education.

Ryburn : Creative Education.

Freeman : Mental Tests.

Morgan : Psychology of the unadjusted school child.

Books for Consultation :

Primary Education Acts.

Srinarain Chaturvedi : Educational Survey of a District.

Kandel : Comparative Education.

McCall : How to Experiment in Education..

Educational Code of United Provinces.

D. *Adult Education* :

1. Theoretical Study—
   - (*a*) Meaning and Scope of Adult Education.
   - (*b*) Its Aims and Values.
   - (*c*) Its future.

2. Principles of Adult Education : Problems of the people as the basis of Adult Education. Voluntary basis, considerations of occupational, hygienic and parental needs. Making use of systematic appraisals to estimate these needs. Initial and additional competence factors.

3. Psychology of Adult Education : Comparisons of Adult and youthful learning.. Causes of the age-changes in ability to learn and in amounts learned. Practical applications of the results of psychological experiments on Adult Learning.

4. History of Adult Education :
   - (*a*) In Western countries, particularly England, the U.S.A. and the U.S.S.R.
   - (*b*) In India with special reference to the Bombay Presidency and the U.P.
   - (*c*) General lessons derived from studies in (*a*) and (*b*) above.

5. Methods of Adult Education: Analytic, Synthetic or combination of both. Functional, Visual, auditory and other aids.

6. Organisation of Adult Education: Voluntary and State Agencies and their urban and rural areas of service in Adult Education. Centres for the training of Adult Educators. Public Schools, Libraries, University extension, Associations, etc. Contemporary Adult Education programmes in progressive countries like England, the U.S.A. and the U.S.S.R.

7. Problems of Adult Education, with special reference to India: The illiteracy problem in India. The problem of finding sufficient number of Adult Education Workers and that of training them. Finding ways and means of creating the demand. Co-ordinating and integrating the work of all the bodies engaged in Adult Education work. The problem of preventing literates from relapsing into illiteracy. The problem of producing literature suitable for adults. Such other relevant problems of Adult Education in India as demand immediate attention.

Practical Work:

Either (*a*) Statistical Survey of Adult Education in a particular Rural or Urban Area, or

(*b*) Research in the Method of Adult Education, or

(c) Psychological tests on educability of Adults.

BOOKS RECOMMENDED

For Intensive Study:

Muller: Principles and Methods in Adult Education.

British Institute of Adult Education—Handbook of Adult Education.

Ruch F. L.: Adult Learning.

Landis and Willard: Rural Adult Education.

Vernon: The Training and Teaching of Adult Workers.

Strickland: Review of Rural Welfare Activities in India.

For Further Study:

Mansbridge: An Adventure in Working Class Education.

Ball: Teaching of Modern Languages to Adults.

Mande: Scheme of Adult Education.

Williams: Adult Education in Great Britain and U.S.A.

Pinkevitch: New Education in Soviet Republic.

Sadler: Continuation Schools in England and Elsewhere.

Thorndike: Adult Learning.

Greenwood: The Relation of the Universities and Education Authorities to Adult Education.

Publications of the British Institute of Adult Education.

Indian Adult Education Conference Reports.

Annual Reports of the Bombay Presidency Adult Education Association.

Hindustani Talimi Sangh: 'Educational Reconstruction'

E. *Educational Administration and Supervision.*

A. *Educational Administration*:

1. The functions of Educational Administration—The purpose of the Educational Administration—State and Educational Administration.

2. *Type of Administration*:

(*a*) Education for political conformity—the totalitarian States.

(*b*) Education for cultural solidarity.

(*c*) Education for adaptation.

(*d*) Education for efficiency.

3. *School Administration*:

(*a*) Education and Schooling—the State and education.

(*b*) School Organisation—classification of schools. Infant schools, Primary schools, Secondary schools, Higher Institutions, Vocational Institutions, the problem of co-education in these schools.

(*c*) An outline study of school systems in some important foreign countries.

(*d*) School Finance—Grants-in-aid System—State control, School accounts, School budgets.

(*e*) School Teachers—Teachers' work, success of teachers, their salary and social status.

(*g*) School building—plan of the school building, requirements and equipments.

(*h*) Contracts with parents—Parent-teachers-organisation.

(*i*) Equality of Educational Opportunity—the proper guidance of pupils within the school and on leaving the school.

B. *Supervision*:

1. The Nature and Scope of Supervision.
2. Principles governing the Process of Supervision.

3. The Administrative Organisation of Supervision.
4. The Planning of Supervision Programmes.

Books recommended for Study:

Kandel: Types of Administration.
Perry: Outlines of School Administration.
Lindsay: Problems in School Administration.
Barr, Burton, Brueckner: Supervision.

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6. *Baroda University*: The regulations of this University for the M.Ed. degree are the same as those of the Bombay University (old course). They are given below:—

O. 215A: Any person who has taken the Degree of Bachelor of Teaching of this University or a Degree of another University recognized as equivalent thereto may be admitted to the Examination for the Degree of Master of Education, after having fulfilled the requirements as mentioned in R. 83.

R. 83C: (*a*) The examination for the degree of M.Ed. shall be either by means of papers or partly by papers and partly by a dissertation which shall be in lieu of one of the two optional sections selected by the candidate out of the four mentioned in Group II in R. 83G or by thesis. The dissertation shall be intimately related to the subject-matter of the section in lieu of which it is offered. The examination to be taken by thesis shall be on a subject connected with the history, theory, practice or administration of Education.

(*b*) A candidate desiring to appear for the M.Ed. examination wholly or partly by papers, must ordinarily attend a College for one academic year after passing the B.T. Examination. In case of non-attendance at a College, the candidate shall work under the guidance of a recognised Post-graduate Teacher of the Bombay University for at least *two* years after passing the B.T. Examination.

(*c*) A candidate desiring to submit a thesis must have worked under the guidance of a Recognized Post-graduate Teacher for at least two years subsequent to his passing the B.T. Examination. The thesis shall be the candidate's own work carried out under the guidance or supervision of the teacher and shall be either (i) a critical analysis of existing data, or (ii) a record of original investigation, or (iii) a combination of these, and shall be accompanied by a certificate signed by the teacher stating that the thesis is worthy of examination.

O. 215B: Two months before submitting the thesis the candidate shall forward to the Registrar, through the recognised teacher, a state-

ment giving the title and a synopsis of the thesis, along with a fee of Rs. 75.

R. 83D: A candidate may submit his thesis at any time during the year, subject to the provisions of O. 215B, and shall submit it in triplicate with at least one set of diagrams (if any).

R. 83E: The Academic Council having before it the suggestions of the appropriate Board of Studies shall recommend to the Syndicate the names of two referees, one of whom shall be the University teacher who has guided the candidate's work. When the Syndicate have appointed the referees the Registrar shall forward the thesis to them. The referees shall report to the Syndicate whether the thesis shall be accepted or rejected, and their report shall be final. In the event of a difference of opinion between the referees the Syndicate shall appoint a third referee and the Syndicate shall decide after considering the reports of all the three referees, whether the Degree shall be conferred. All reports shall be circulated to the members of the relevant Board of Studies and placed before the Academic Council for information.

R. 83F: A thesis which has been rejected may be re-submitted after due revision, subject to O. 215B, and R. 83D. No further fee shall be charged to a candidate who re-submits his thesis for examination after due revision.

R. 83G: The scheme of papers for M.Ed. is as under:—

Each paper shall carry 100 marks and be of three hours' duration.

The dissertation shall carry 200 marks.

GROUP I

COMPULSORY FOR ALL CANDIDATES

(Two papers)

Paper I—Philosophy of Education.

Paper II—Advanced Educational Psychology.

GROUP II

OPTIONAL—4 PAPERS

(Candidates shall have the option of selecting any *two* of the four sections A, B, C and D, each of which shall comprise two papers. Candidates may submit a dissertation in lieu of one of the two sections offered by them.)

Section A—History of Education.

Paper I—Ancient and Modern History of Indian Education.

Paper II—History of Education in general, including Movements and Reformers.

Section B—Administration of Education

Paper I—Administration of Education in India and in some of the Indian Provinces and States.

Paper II—(*a*) Principles of Educational Administration and Supervision; (*b*) Administration of Education in the Province of Bombay.

Section C—Comparative Education.

Paper I—Education in England, Germany and the U.S.A.

Paper II—Education in China, Japan and the Soviet Union.

Special features of Primary and Adult Education in Turkey, Egypt, Ceylon, Philippines and Denmark.

Section D—Experimental Education

Paper I—(*a*) Statistical Methods, and (*b*) Techniques of Research in Education.

Paper II—Experimental Psychology.

SYLLABUS

Group I (Compulsory)

PAPER I

Philosophy of Education

Conceptions of education. The biological, physiological, sociological, psychological and philosophical aspects of education. Naturalism, pragmatism and idealism in education.

Ancient, mediaeval and modern ideals of education. Democratic and Fascist ideals. Individualistic and socialistic ideals. Education of the superior, normal and handicapped children. Education of the delinquents and the criminal classes. 'Freedom of the Child.' Movement. Women's education and the connected problems.

The curriculum of schools. Recent findings on the curriculum. Discipline. Ancient and modern ideas of discipline.

Training of teachers. Vocational guidance. Professional and technical education. Compulsory primary education. Religious education.

PAPER II

Advanced Educational Psychology

Different Schools of Psychology. Nature of Educational Psychology. Human abilities—their inheritance and acquisition. Animal behaviour. Human behaviour. The working of the human body. The Development of the mind in all its aspects—intellect, emotions and character. Learning, Intelligence and its measurement. Acquired abilities and their measurement. Transfer of training. Work and fatigue. Development of personality and formation of character. The Psychology of the Unconscious. Psychology of the Group.

GROUP II (OPTIONAL)

SECTION A—HISTORY OF EDUCATION

PAPER I

Ancient and Modern History of Indian Education.

I. *Ancient and Buddhist India*:

1. The Factors in Ancient Indian Education.
   - (*a*) The Ethnic factor.
   - (*b*) The Geographical factor,
   - (*c*) The Social factor, and
   - (*d*) The Religious factor.
2. The conception and aims of Education.
3. Educational rituals.
4. The Student and the Teacher:
   - (*a*) Their Duties and Mutual relations.
   - (*b*) Rules for student life—Daily life.
   - (*c*) Importance of the Teacher—His Social position—His Training.
   - (*d*) "Gurukula" system.
   - (*e*) College terms and holidays—Duration of the course.
   - (*f*) The problem of Punishment.
   - (*g*) Admission test and qualifications.
5. Educational Curriculum—Methods of teaching—Examinations.
6. Professional education and education in the useful Arts.
7. Educational Agencies, Institutes and Centres.
8. A Comparative Study of the Brahmanic and the Buddhist Systems of Education.
9. Female Education.

10. The Part played by the State and Society in Ancient Indian Education.

II. *Muslim Period* :

1. The Philosophy of Muslim Education—with reference to (i) the Koran, (ii) Hadis, and (iii) Thinkers of the type of Al Gazali.
2. The individual contributions of prominent Muslim Kings (1000 A.D.-1857 A.D.) towards Education, e.g. Mohomed Ghori, Qutbud-din, Mohomed Tughlak, Firoz Tughlak, Sher Shah, Akbar and Aurangzeb.

   The types of Muslim educational institutions—their Syllabuses and Working, Media of Instruction—Their utility in spreading Education and Literacy.
4. The Financial Aspect.
5. Private enterprise in the field of Muslim Education.
6. Types of Education—(*a*) Liberal, (*b*) Professional, (*c*) Princely, and (*d*) Female.
7. Methods of Instruction—(*a*) The Monitorial Method, (*b*) The Lecture Method (with special reference to the Study Circle) and (*c*) The Domestic Method.
8. Famous Centres of Education—Their Specialities.
9. Convocations and Degrees.

III. *British Period* :

The same topics as in the Syllabus for the B.T. Examination. But the candidates will be expected to cover the portion in greater detail and be well acquainted with the original documents dealing with the development of the modern educational system in India.

PAPER II

History of Education in general including Movements and Reformers.

1. Liberal Education—Plato, Aristotle.
2. Monasticism and Scholasticism.
3. The Renaissance : Humanistic Education ; Humanistic Realism—Montaigne. Educational Influences of the Reformation. The Early Scientific Movement—Bacon, Comenius.
4. The Disciplinary Conception of Education—John Locke.
5. Naturalism in Education—Rousseau.
6. The Psychological Tendency—Pestalozzi, Herbart, Froebel.
7. The Scientific Tendency—Herbert Spencer, Thomas H. Huxley.
8. The Sociological Tendency and Nationalism in Education.

9. Current Tendencies in Education—John Dewey, Sir T. P. Nunn, Dr. Maria Montessori.
10. Wardha Scheme of Basic Education.

SECTION B—ADMINISTRATION OF EDUCATION

PAPER I

Administration of Education in India and in some of the Indian Provinces and States.

1. Spheres of Government of India and the Provincial Governments in Education, Administrative and Advisory machinery under the Government of India for education.
2. Administration of Education in the Provinces of Bengal, the Punjab, U.P. and Madras and the States of Baroda, Hyderabad, Mysore and Travancore.

PAPER II

(a) *Principles of Educational Administration and Supervision;*

(b) *Administration of Education in the Province of Bombay.*

(*a*) (1) The scope of educational administration.

(2) Factors determining the character of administration.
(3) The purpose of administration.
(4) Functions of a central authority.
(5) Controls—external and internal.
(6) Participation of teachers in administration.
(7) Participation of parents in administration.
(8) Educational Finance.
(9) Local Administration.
(10) The Executive Official.

(*b*) Administration in Bombay.

(1) Bombay P.E. Acts and Rules—The authorities—Department—Local Authorities—The Administrative Machinery—Government and Local Boards—Powers and Duties.
(2) Secondary Education — Administration — Control — Curriculum—Inspection—University and Secondary Education.
(3) Higher Education—Spheres of University and Department—University Act (Bombay).
(4) Technical Education and Special Institutions—Their Administration.
(5) Training of Teachers—Primary and Secondary.

SECTION C—COMPARATIVE EDUCATION

A study of the educational ideals, national systems of education, progressive educational movements and present-day educational problems in the countries mentioned below.

Particular attention shall be paid to points of special significance to the problems of education in India.

Paper I—England, Germany and U.S.A.

Paper II—(*a*) Soviet Union, China and Japan. (*b*) Special features of Primary Education and Adult Education evolved by the following countries: Turkey, Egypt, Ceylon, Philippines and Denmark.

SECTION D—EXPERIMENTAL EDUCATION

Paper I—*Statistics and Techniques of Research in Education*:

Educational Statistics. Statistical methods of conducting a research. First principles of factorial analysis of mental abilities. Techniques of individual and group measurement of rating and interviewing; of measuring personality traits. Techniques and methods of research in the various fields of Education.

Paper II—*Experimental Psychology*:

The psycho-physical methods. Sensation. Perception. Attention. Reflex action—Reaction time. Work and Fatigue. Suggestion. Feeling and Emotion. Imagery. Association. Learning and Memory. Imagination. Higher Thought Processes. Language Development. Intelligence Tests.

Note.—(1) Students are expected to perform at least *fifty* experiments on the topics enumerated above.

(2) Candidates are required to maintain a log book of the experiments performed and to produce a Certificate of having performed the experiments.

R. 83H:

STANDARD FOR PASSING THE EXAMINATION

To pass the examination a candidate must obtain either (i) one-fourth of the full marks in each paper separately and in the dissertation, if any, and (ii) three-eighths of the total marks obtainable.

Those of the successful candidates who obtain 65 per cent or more of the total marks will be placed in the First Class and those obtaining 50 per cent or more in the Second Class.

TEXT-BOOKS

Note—Books marked with an asterisk are recommended for detailed study.

(1) *Philosophy of Education.*

*1. *Godfrey Thomson*—A Modern Philosophy of Education.
2. *Bertrand Russel*—Education and the Social Order.
*3. *Symonds*—Mental Hygiene of the School Child.
4. *Ross*—Ground work of Educational Theory.
*5. *Bode*—Modern Educational Theories.
*6. *Brubacher*—Modern Philosophies of Education.
7. *Kilpatrick*—Source Book of the Philosophy of Education.

(2) *Advanced Educational Psychology.*

*1. *Sandiford*—Educational Psychology.
2. *Koffka*—The Growth of the Mind—An Introduction to Child Psychology.
3. *Stern*—Psychology of Early Childhood.
4. *Brooks*—Psychology of Adolescence.
5. *J. B. Watson*—Psychology from the standpoint of a Behaviourist.
*6. *S. Freud*—Introductory Lectures on Psycho-Analysis.
7. *McDougall*—Body and Mind.
8. *Charles Fox*—Mind and its Body.
*9. *McDougall*—Energies of Men.
*10. *Cameron*—Viewpoints in Educational Psychology.
*11. *Thouless*—General and Social Psychology.

(3) *History of Education.*

PAPER I

I. *Ancient and Buddhist India.*

*1. *Dr. A. S. Altekar*: Education in Ancient India. (The Indian Book Shop, Benares City.)
*2. *F. E. Keay*: Indian Education in Ancient and Later Times. (Oxford University Press.)
3. *S. K. Das*: The Educational System of the Ancient Hindus.
4. *V. P. Bokil*: The History of Education in India, Part I (Aryan Period).

Mazumdar: A History of Education in Ancient India. (Macmillan & Co.)

6. *C. N. Patwardhan*: History of Education in Medieval India (600-1200 A.D.).
7. *H. D. Sankalia*: The University of Nalanda. (B. G. Paul & Co., Madras.)
8. *Dr. Ishwara Topa*: Our Cultural Heritage. (Kitabistan, Allahabad.)
9. *Dr. (Mrs.) Kamalabai Deshpande*: Child in Ancient India.

II. *Muslim Period.*

*1. *N. Law*: Promotion of Learning in India during the Muslim Rule.
2. *Keay*: Indian Education in Ancient and Later Times.
*3. *Jaffar*: Education in Muslim India.
4. *Jaffar*: Some Cultural Aspects of Muslim Rule in India.
5. *Abul Hasnat Nadvi*: Qadeem Islami Darsgahen.

III. *British Period.*

*1. *Nurullah and Naik*: A History of Education in India during the British Period.
2. *Meston*: Indian Educational Policy.
*3. *A. N. Basu*: Education in Modern India.
4. Hartog Committee's Report.
5. *Bohman Behram*: Educational Controversies in India.
6. *Parulekar*: Literacy in India.
7. Central Advisory Board's Report on Post-war Educational Reconstruction in India.

(4) *History of Education.*

PAPER II

*1. A Text Book in the History of Education by Paul Monroe, Ph.D. (Macmillan & Co.).
*2. Modern European Educators and their work by Adolph E. Meyer, Ph.D. (Prentice-Hall, New York, 1934).
Educational Year Book, 1941 (Columbia University), Relevant portions.
4. A Student's History of Education by F. P. Graves, Ph.D. (Macmillan & Co.).
5. *Rusk*: Modern Educators.
*6. *Quick*: Modern Educators.
7. Wardha Scheme of Basic Education—Zakir Hussain Committee's Report.
8. *Helen Wodehouse*: History of Education.
*9. Nationalisation and Education since 1789 by Reisner.

(5) *Administration of Education.*

PAPER I

1. Government of India—Indian Education—Quinquennial Reports 1922-27 onwards.
2. *J. M. Sen*: Elementary Education in India.
3. Central Advisory Board's Report (Sargent Scheme).
4. Reports on Public Instruction of the Provinces and States concerned for the latest five years.

(6) *Administration of Education.*

PAPER II

*1. *Kandel*: Studies in Comparative Education, Chapter V.
*2. *Mohiyuddin and Siddhalingaiah*: 'School Organization and Management.
3. *H. G. Stead*: Modern School Organization (University Tutorial Press, London).
*4. Critical Problems in School Administration—Twelfth Year Book —1934—Published by the Department of Superintendence—Washington.
*5. Educational Year Book—The End of an Era—Chapter IV—1941—Columbia University, New York.
6. Bombay D.P.I.'s Reports—The latest five Annual Reports and Quinquennial Reports from 1921-22 onwards.
7. The Bombay P.E. Acts and Rules thereunder.

(7) *Comparative Education, Papers I and II.*

General:

**Kandel, I. L.*: Comparative Education (New York, 1933).

Educational Year Books of the International Institute—Teachers' College, Columbia University (Related chapters).

Reports of World Education Conferences (Related chapters).

China:

**Purcell*: Problems of Chinese Education.

*The Joint Office of the Educational and Cultural Organizations of China, 1938. Social Education in China and other Brochures on Health Education, Administration, Elementary Education, Secondary Education, Higher Education, etc.

League of Nations—Reorganization of education in China.

Nationalism and Education in China.

Freyn Hubert: Chinese Education in the War, 1940.

Japan :

**Masood R.*: Japan and its Educational System.

**Keinlyside and Thomas*: History of Japanese Education and its present Educational System.

Report of the Seventh World Education Conference (Related Chapters).

Russia :

**Pinkevich, A.*: The New Education in Soviet Russia (New York, 1929).

Harper S. N.: Civic Training in Soviet Russia (Chicago, 1929).

Hans, N. and Hessen, S.: Educational Policy in Soviet Russia (London, 1930).

England :

**Norwood, C.*: The English Educational System (London, 1928).

Norwood, C.: The English Tradition in Education (London, 1928).

Percy, Lord Eustace: The Yearbook of Education, 1932 (London).

Reports of Committees appointed by the Board of Education dealing with the re-organization of Education from 1935 onwards (Major recommendations only).

U.S.A. :

**Russel, J. D. and Judd, C. H.*:The American Educational System, Boston, 1940.

Douglas, A. A.: The American School System (New York, 1939).

Cubberley, E. P.: Public Education in the United States (Boston, 1919).

Germany :

**Ahmed, Zia Uddin*: Systems of Education (Related chapters).

Alexander, T. and Parker, B.: The New Education in the German Republic (New York, 1929).

Wilhelm and Crafe, G.: German Education Today (Berlin, 1937).

Related chapters in the Year Books of Education published in England and U.S.A. (related chapters).

Other Countries :

Year Books of Education (Published by Evan's Bros.).

Year Books of Education—Teachers' College Columbia University.

(8) *Experimental Education.*

PAPER I

*1. *H. E. Garrett*: Statistics in Psychology and Education.
*2. *R. A. Fisher*: Statistical Methods for Research Workers.
3. *P. E. Vernon*: The Measurement of Abilities.
*4. *Thomson*: Factorial Analysis of Human Abilities.

Or

Burt: Factors of the Mind.
5. *Thurstone*: Primary Mental Abilities.
6. *W. P. Alexander*: Intelligence Concrete and Abstract.
*7. *C. V. Good*: Methodology of Educational Research.

PAPER II

*1. *Myers*: Experimental Psychology.
*2. *Collins and Drever*: A First Laboratory Guide in Experimental Psychology.
*3. *Collins and Drever*: Experimental Psychology.
4. *Kamat*: Measuring Intelligence of Indian Children.
*5. *Burt*: Mental and Scholastic Tests.
6. *Wilson and Hoke*: How to measure in Education.
7. *Wynn Jones*: An Introduction to the Theory and Practice of Psychology.
8. *C. W. Valentine*: An Introduction to Experimental Psychology.

7. *The Bombay University* The old M.Ed. course of the University of Bombay has already been detailed above under the Baroda University. With effect from the year 1952, a new M.Ed. course will be adopted by this University. Its outline can be understood from the following extract out of the report of a Committee appointed for the purpose :—

We recommend that the existing course for the M.Ed. degree of the Bombay University should be revised on the following principles:

(*a*) The duration of the course should be *two* years in the case of those students who are employed, and, therefore, do it on a part-time basis. It is obvious that these students do not get adequate time to do justice to the course in one year.

(*b*) There is a class of students—although a small one—who do this course on a whole-time basis. In order to provide for the needs of these students, an alternative arrangement is necessary. Such

'full-time' students may be allowed to appear for the examination after keeping two terms only. For this purpose, a full-time student should be defined as one who is not employed and who attends a college or institute for not less than four hours per day, for purposes of lectures, tutorials and library work.

(*c*) A thesis on an educational topic should be an obligatory part of the examination. In the case of full-time students, it should be submitted as at present, one month before the date of the examination. In the case of part-time students, however, it should be submitted six months before the date of the examination.

It should be laid down as a rule that students should communicate the subject of their thesis to the University not later than 20th July following their admission to the course and that the approval of the subject by the competent authority of the University would be a condition precedent to the acceptance of the thesis. Such approval should normally be communicated to the student before the end of September following. If a subject suggested by any student is not approved, he will be at liberty to suggest others, provided that in all such cases the subject is got approved by the end of October at the latest.

(*d*) In addition to the thesis referred to in (*c*) above, each candidate will be required to appear in four papers of three hours each. The two papers on Philosophy of Education and Advanced Educational Psychology, will be compulsory. Candidates must, in addition, take two papers more from any one out of the five groups mentioned in (*f*) below. Each paper will carry 100 marks and the thesis, 200 marks.

(*e*) At present the minimum marks required for passing are 25% in each paper. We propose that in future this minimum should be raised to 30% in each paper and to 40% in the case of the thesis. Similarly the minimum number of marks required to pass the whole examination should be raised from 37½% to 40%. All other regulations regarding the standard for passing may continue as at present.

(*f*) The following should be the scheme of papers for the examination:—

Compulsory:

Paper I—Philosophy of Education.

Paper II—Advanced Educational Psychology.

Optional:

Group I—Education in Modern India—Paper I and Paper II.

Group II—Administration of Education—Paper I and Paper II.

Group III—Comparative Education—Paper I and Paper II.

Group IV—History of Educational Thought—Paper I and Paper II.

Group V—Experimental Education—Paper I and Paper II.

2. In the light of the general considerations stated above, we have prepared a new syllabus. We recommend that it should be brought into force from 20th June 1951, i.e. from the examination to be held in 1952.

NEW SYLLABUS FOR THE M.Ed. EXAMINATION

(For the Year 1952 and onwards)

COMPULSORY PAPER I

Philosophy of Education:

1. The Scope and Functions of Educational Philosophy.
2. The Sociological Psychological and Philosophical Aspects of Education.
3. Realism, Naturalism, Pragmatism and Idealism in Education.
4. Ideals of Education—Individualistic and Social, Democratic and Fascist.
5. Education in relation to Socio-economic and Political Systems.
6. Education and Social Reconstruction with special reference to Basic Education.
7. The Principles of Curriculum-making.
8. The Problems of Religious Education with special reference to India.
9. Education and National Culture.
10. Education for International Understanding.

COMPULSORY PAPER II

Advanced Educational Psychology:

I. The Scope of Educational Psychology.

(a) Man's Equipment.

(b) The Nature of Growth and Adjustment—General and Normal; Individual; Abnormal.

II. The main Schools of Psychology (Behaviourism, Purposivism, Noe-genesis, Gestalt Psychology, Social Psychology and Psycho-analysis) and their general approach to the problems of Educational Psychology.

III. Special Problems for Study—General and Normal.

(a) *Learning* :

(i) Nature and Scope of the Learning Process.
(ii) Theories of Learning and Laws of Learning.
(iii) Factors that condition Learning.
(iv) Transfer of Training.
(v) Fatigue in Learning.
(vi) Psychology of School Subjects.
(vii) Applications in Education.

(b) *Integration of Character and Personality* :

(i) The Psychology of Character and Personality.
(ii) Applications in Education.

IV. Special Problems for Study—Individual :

(*a*) Intelligence and its Measurement.
(*b*) Special Abilities and their Measurement.
(*c*) Acquired Abilities and their Measurement.
(*d*) Personality Traits and their Measurement.
(*e*) Vocational Guidance and Selection.

V. Special Problems for Study—Abnormal :

(*a*) Repression and the Unconscious.
(*b*) Abnormalities of Behaviour—Complexes—Neurosis.
(*c*) The Study of Deliquency.
(*d*) Mental Hygiene and Child Guidance.

GROUP I

EDUCATION IN MODERN INDIA

Paper I.—*History of Education in India from 1698 onwards.*

1. Life, ideology and contribution of eminent educationists.
2. A study of the following documents :

(*a*) Adam's reports : Enquiries by Elphinstone and Munro.
(*b*) Minutes on Education by Macaulay, Elphinstone and Auckland.
(*c*) Wood's Education Despatch.
(*d*) Report of the Indian Education Commission.
(*e*) Report of the Indian Universities Commission, 1901.
(*f*) Government Resolutions on Educational Policy, 1904 and 1913.
(*g*) Report of the Calcutta University Commission.

(*h*) Report of the Hartog Committee.

(*i*) Report on Post-War Educational Development in India—1944.

(*j*) Report of the Indian Universities Commission, 1949.

3. The growth of primary, secondary, university, vocational and adult education.
4. Evolution of educational administration and finance.
5. Education and Renaissance in Modern India: Growth of National Education.

Paper II.—*Problems of Indian Education.*

1. The problem of the national language, and the place of English in education in Free India.
2. The spheres of the Central Government, State Governments, and Local Authorities in education. Their relations with each other in matters of educational administration and finance.
3. Problems of the universities in India with special reference to types of organisation, functions, medium of instruction and finance.
4. Problems of secondary education with special reference to:—
   (*a*) Relationship with primary and university education,
   (*b*) Curriculum and examinations,
   (*c*) Finance, and
   (*d*) Administration and supervision.
5. Problems of primary education with special reference to:—
   (*a*) Compulsory education,
   (*b*) Basic education,
   (*c*) Curriculum and examinations,
   (*d*) Finance, and
   (*e*) Administration and supervision.
6. Pre-primary education.
7. Adult education with special reference to liquidation of illiteracy and 'Social Education'.
8. Training, emoluments, and conditions of service of primary and secondary teachers.
9. Problems of professional and vocational education.
10. Outstanding educational institutions in India such as Vishwa-bharati, Gurukul-Kangri, Jamia-Millia, and the Indian Women's University.
11. Education of the handicapped.
12. Problems of education of backward communities and aboriginals.

GROUP II

ADMINISTRATION OF EDUCATION

Paper I.—*Principles of Educational Administration and Finance.*

1. Scope of educational administration and the factors determining its character.
2. The State in relation to education, with reference to the Legislature, the Ministry and the Central, the State and the Local Governments.
3. Supervision—concepts, principles, planning and organisation. The importance of research in supervision.
4. Parent-teacher co-operation.
5. Educational finance.

Paper II.—*Educational Administration and Finance in India with special reference to the State of Bombay.*

A.—The Central Government

1. (*a*) The role of the Central Government in education from 1773 to the present day.
   (*b*) The Central Advisory Board of Education.
   (*c*) The University Grants Committee.
   (*d*) Central Grants to education in the past and present.
   (*e*) Comparison of the role of the Central Government in education to that of the Federal Government in the U.S.A.
   (*f*) Educational clauses in the Constitution of India.
2. The sphere of the Provincial or State Governments in education under the Government of India Acts of 1919 and 1935 and under the new Constitution.
3. Organisations of the Ministry of Education.

B.—Educational Administration in the State of Bombay

1. Government and its advisory bodies.
2. The Education Department—its organisation and functions.
3. The Universities in the State. Their relation to the Government and the Education Department. University teaching and finance.
4. Private educational enterprise and the Bombay Grant-in-Aid Code.
5. Secondary Education and its problems.
6. The Bombay Primary Education Acts and Rules.
7. Problems of Primary Education in the City of Bombay.
8. Technical education and special institutions.

9. Training of teachers.
10. Finance of education.
11. Problems of educational reconstruction.

GROUP III

COMPARATIVE EDUCATION

Paper I.—*Systems of Education.*

A study of pre-primary, primary, secondary, and university education in the U.K., the U.S.A., the U.S.S.R., China and Japan.

Paper II.—*Special Problems of Education.*

1. A study of the problem of liquidation of illiteracy in the U.S.S.R., the Philippines, Mexico and China.
2. A study of social education, vocational education, teacher training and educational finance in the U.K., Denmark, Turkey, the U.S.A., the U.S.S.R., and Japan.

GROUP IV

HISTORY OF EDUCATIONAL THOUGHT

Paper I.—*History of Educational Thought in the East.*

A.—Brahmanic Education

1. Educational Ideals—with reference to (1) The Vedas; (2) The Brahmanas; and (3) The Upanishads.
2. Educational rituals.
3. Educational Agencies and Institutions.
4. The Student and the Teacher.
5. "Gurukula" system.
6. Curriculum—Methods of teaching and Examinations.
7. Vocational education.
8. Education of girls.

B.—Buddhist Education

1. Educational Ideals.
2. Curriculum, Methods of teaching and Examinations.
3. The Buddhist Universities—Nalanda, Vikramshila, Canjeevaram and Odantpuri—with special reference to:
   (*a*) Origins, development and decline;
   (*b*) Contribution to culture; and
   (*c*) Teachers and methods.
4. Monastic and Secular Education.

C.—Chinese Education

1. Secular Education in Ancient China.
2. Educational Ideas of Confucius, Mencius and Lao-tse.
3. Influence of Buddhism on Ancient Chinese Education.
4. Monastic Education in China.

D.—Islamic

1. The Ideals of Muslim Education—with reference to the Koran, Hadis and thinkers like Al Ghazali.
2. The Types of Educational Institutions—their organisation and curriculum.
3. Types of Education—(*a*) Liberal education; (*b*) Professional education; (*c*) Education of the Prince; (*d*) Education of Girls.
4. Methods of teaching.
5. Famous Centres of Education.
6. Examinations, Convocations and Degrees.
7. Development of Educational thought in Islamic countries.
8. The contributions of prominent Muslim kings of India to the Development of Education.

Paper II.—*History of Educational thought in Europe and America.*

1. Greek and Roman Education—Socrates, Plato, Aristotle and Quintilian.
2. Education in the Middle Ages; Monasticism, Scholasticism, and Mediaeval Universities.
3. The Renaissance; Humanistic Education, Humanistic Realism—Montaigne. Educational Influences of the Reformation. The early Scientific Movement—Bacon, Comenius.
4. The Disciplinary concept of Education—John Locke.
5. Naturalism in Education—Rousseau.
6. The Psychological Tendency—Pestalozzi, Herbert, Froebel.
7. The Scientific Tendency—Herbert Spenser, Thomas H. Huxley.
8. The Sociological Tendency and Nationalism in Education.
9. Current Tendencies in Education—John Dewey, Sir T. P. Nunn, Dr. Maria Montessori.

GROUP V

EXPERIMENTAL EDUCATION

Paper I.—*Statistics and Techniques of Research in Education.*

Educational Statistics, Statistical methods of conducting a Research. First principles of Factorial Analysis of Mental Abilities. Techniques of individual and group measurement of rating and interviewing;

of measuring personality traits. Techniques and methods of research in the various fields of Education.

Paper II.—*Experimental Psychology.*

The psycho-physical methods. Sensation. Perception. Attention. Reflex action—Reaction time. Work and Fatigue. Suggestion. Feeling and Emotion. Imagery. Association. Learning and Memory. Imagination. Higher Thought Processes. Language Development. Intelligence Tests.

Note 1.—Students are expected to perform at least fifty experiments on the topics enumerated above.

2. Candidates are required to maintain a log book of the experiments performed and to produce a Certificate of having performed the experiments.

BOOKS RECOMMENDED

(*The Books marked with an asterisk are meant for detailed study*)

COMPULSORY PAPER I

Philosophy of Education

*1. *John Dewey*: "Democracy and Education" (The Macmillan Co.), 1930.

*2. *Thomson*: "A Modern Philosophy of Education" (George, Allen and Unwin), 1928.

Ross: "Groundwork of Educational Theory" (George G. Harrap & Co.), 1942.

4. *Kilpatrick*: "A Source-Book in the Philosophy of Education" (The Macmillan Co.), 1930.

*5. *Brubacher*: "Modern Philosophies of Education" (McGraw-Hill), 1939.

6. *R. Livingstone*: (*a*) "Education for a World Adrift" (The Cambridge University Press), 1943; (*b*) "The Future in Education" (The Cambridge University Press), 1941.

*7. (*a*) "The Foundations and Technique of Curriculum-Construction" (Twenty-sixth Year Book of the National Society for the Study of Education), 1926; (*b*) "American Education in the Post-war Period (Curriculum reconstruction)—Forty-fourth Year Book of N.S.S.E., Part I, 1945.

*8. *T. P. Nunn*: "Education: Its data and Principles" (Edward Arnold & Co.), 1945.

9. *K. G. Saiyidain*: "Education for International Understanding" (Hind Kitabs), 1948.

COMPULSORY PAPER II

Advanced Educational Psychology

*1. *MacDougall*: "Energies of Men" (Methnen & Co.), 1948.

*2. *Sandiford*: "Educational Psychology" (Longmans, Green & Co.), 1938.

*3. *Gates*: "Psychology for Students of Education" (The Macmillan Co.), 1945.

*4. *Woodworth*: "Contemporary Schools of Psychology" (Methnen & Co.), 1933.

*5. *Fleming*: "Adolescence" (Roultedge & Kegan Paul), 1948.

6. *Douglass and Holland*: "Fundamentals of Educational Psychology."

7. *Adler*: "Education of Children" (George Allen & Unwin), 1930.

8. *Freud*: "Introductory Lectures on Psycho-analysis" (George Allen & Unwin), 1922.

9. *Watson*: "Behaviourism" (Kegan Paul, Treuch & Trubner), 1925.

10. *Koffka*: "Growth of the Mind" (Kegan Paul, Treuch & Trubner), 1931.

11. *Burt*: "The Young Delinquent" (University of London Press), 1944.

GROUP I

EDUCATION IN MODERN INDIA

*1. *Nurullah and Naik*: "History of Education in India during the British Period" (Macmillan & Co.), 1943.

*2. *H. V. Hampton*: "Biographical Studies in Indian Education" (Oxford University Press), 1946.

3. *B. K. Boman-Behram*: "The Cultural Conquest of India" (D. B. Taraporevala Sons & Co.), 1943.

4. C. *S. S. O'Malley*: "Modern India and the West" (Oxford University Press), 1941.

5. *J. M. Sen*: "History of Elementary Education in India" (The Book Company), 1941.

6. "Quinquennial Reviews of the Progress of Education in India since 1886."

7. "Selections from Educational Records", Vols. I and II.

8. *R. V. Parulekar*: "Literacy in India" (Macmillan & Co.), 1939.

9. *F. C. Laubach*: "India shall be Literate", National Christian Council, Nagpur, 1940.

10. *D. D. Desai*: "Primary Education in India" (Servants of India Society), 1938.

11. *Prem Chand Lal*: "Reconstruction and Education in Modern India" (George, Allen & Unwin), 1932.

12. *Mason Olcott*: "Better Village Schools" (Y.M.C.A. Publishing House), 1943.

*13. *K. L. Shrimali*: "The Wardha Scheme" (1949).

14. *Swami Nath Sharma*: "Lingua Indiana" (Nalanda Publications), 1947.

15. *Mahatma Gandhi*: "Our Language Problem" (Anand Hingorani), 1942.

*16. *S. R. Dongerkery*: "Universities and Their Problems" (Hind Kitabs), 1948.

17. *National Planning Committee*: "Education" (Vora & Co.), 1948.

18. "Reports on Indian Educational Problems" published by the Central Advisory Board of Education.

19. Five-Year-Development Plans" (1947-52) published by the Central and State Governments in India (Educational Schemes only).

20. "Resolutions and Proceedings of the All-India Educational Conference" since 1937.

GROUP II

ADMINISTRATION OF EDUCATION

Paper I.—*Principles of Educational Administration and Finance.*

*1. *I. L. Kandel*: "Studies in Comparative Education", Chap. V (George G. Harrap & Co.), 1933.

*2. *J. B. Sears*: "Public School Administration" (The Ronald Press Co.), 1947.

William G. Carr: "School Finance" (Stanford University Press), 1933.

*4. "Supervision of Instruction as a Function of State Departments of Education" (U.S. Office of Education), 1941.

5. *Harold Benjamin*: "Emergent Conceptions of the School Administrator's Task" (Stanford University Press), 1938.

*6. *Nelson B. Henry*: "Changing Conceptions in Educational Administration" (The University of Chicago Press, the Forty-fifth Year-Book of the National Society for the study of Education, Part II), 1946.

7. *Julia E. Johnsen*: "Federal Aid for Education: The Reference Shelf", Vol. 14 (The H. W. Wilson Co.), 1941.

8. *Mort and Reusser*: "Public School Finance" (McGraw Hill Book Co.), 1941.

*9. *Barr, Burton and Brueckner*: "Supervision" (D. Appleton—Century Co.), 1938.

10. *Reavis, William O.*: "Democratic Practices in School Administration" (Chicago University Press), 1939.

Paper II.—*Educational Administration and Finance in India with special reference to the State of Bombay.*

*1. "Quinquennial Reviews of Education in India since 1886" (relevant portions only).

2. "Issues of the Education Quarterly", 1949-50 (relevant articles only).

3. "Reports of the Director of Public Instruction", Bombay, since 1921-22.

*4. "Bombay P.E. Acts of 1923, 38, and 47", "The Bombay P.E. Rules 1949".

5. "The City of Bombay Primary Education Act", 1920.

6. "The School Committee Manual", 1947 (relevant portions only).

*7. *R. V. Parulekar*: "Report on Revision of Constitution, Powers and Duties of the Schools Committee of the Bombay Municipal Corporation and on some Educational and Administrative Problems of Primary Education in the City" (Municipal Printing Press), 1949.

*8. "The Bombay Grant-in-Aid Code."

*9. All reports of committees on educational topics appointed by the Government of Bombay since 1921 (students will be expected to have a knowledge of the action taken by Government on the recommendations made in these reports).

*10. "Acts of all the Universities in the State"; "The S.S.C. Examination Act, 1948."

GROUP III

COMPARATIVE EDUCATION

Papers I & II:

A.—General

*1. *N. Hans*: "Comparative Education" (Routledge and Kegan Paul), 1949.

*2. *I. L. Kandel*: "Studies in Comparative Education" (George G. Harrap & Co.), 1933.

B.—U.K.

3. *S. J. Curtis*: "History of Education in Great Britain" (University Tutorial Press), 1948.

4. "School and Life" (H.M.S.O.), 1947.

5. "Out of School" (H.M.S.O.), 1948.

6. "University Development from 1935 to 1947" (H.M.S.O.), 1948.

*7. *Wells and Taylor*: "The New Law of Education" (Butterworth & Co.), 1947.

8. *Rex Warner*: "English Public Schools" (William Collins), 1945.

*9. *W. O. Lester-Smith*: "Education in Great Britain" (Home University Library, O.U.P.), 1949.

10. "Further Education" (H.M.S.O.), 1947.

11. "The Education of the Adolescent" (H.M.S.O.), 1941.

12. "Secondary Education with Special Reference to Grammar Schools and Technical High Schools" (H.M.S.O.), 1938.

C.—U.S.A.

*13. *Russell and Judd*: "The American Educational System" (Houghton Mifflin & Co.), 1940.

*14. *De Young*: "Introduction to American Public Education" (McGraw Hill), 1946.

15. *A. A. Douglass*: "The American School System" (Farran & Rinchart, Inc.), 1941.

16. *Julia E. Johnsen*: "Federal Aid to Education" (The H. W. Wilson Co.), 1941.

17. *Myers and Williams*: "Education in a Democracy" (Prentice-Hall), 1949.

D.—U.S.S.R.

*18. *Beatrice King*: "Changing Man" (Victor Gollancz), 1936.

*19. *Beatrice King*: "Russia Goes to School" (Heinemann), 1948.

20. *M. J. Shore*: "Soviet Education (Philosophical Library), 1947.

E.—Other Countries

21. *Andreas Boje and Others*: "Education in Denmark" (Oxford University Press).

22. *Noelle Doris*: "Education for Life—A Danish Pioneer" (William & Norgate), 1931.

23. "Education in Turkey" (two volumes published by the Ministry of Education, Ankara), 1945.

24. *Purcell*: "Problems of Chinese Education" (Kegan Paul), 1936.

25. "Reorganisation of Education in China" (League of Nations).

26. *Hall*: "Education for New Japan" (Yale University), 1949.

27. *Keinlyside and Thomas*: History of Japanese Education and its present Educational System.

28. "The Year-Books of Education" (Evans Brothers), 1948 and 1949 (Relevant portions only).

GROUP IV

Paper I:

*1. *S. K. Das*: "The Educational System of the Ancient Hindus", Calcutta, 1933.

*2. *R. K. Mookerjee*: "Ancient Indian Education" (Brahmanical and Buddhist), (Macmillan & Co.), London, 1947.

3. *Dr. Ishwara Topa*: "Our Cultural Heritage" (Kitabistan, Allahabad), 1940.

4. *T. W. Rhys Davids*: "Early Buddhism" (Archibald Constable & Co.), London, 1914.

*5. *Mrs. C. F. Rhys Davids*: "The Birth of Indian Psychology" and its "Development in Buddhism" (Luzac & Co.), London, 1936.

6. *H. D. Sankalia*: "The University of Nalanda" (B. A. Paul & Co.), Madras, 1934.

*7. *Phanindranath Bose*: "The Indian Teachers of Buddhist Universities" (Theosophical Publishing House, Adyar), Madras, 1923.

8. *H. A. Giles*: "Confuciansim and its Rivals" (Williams & Norgate), London, 1915.

*9. *K. S. Latourette*: "The Chinese, Their History and Culture" (Macmillan Co., New York, 1934), Chapter XIX, pp. 290 to 330.

*10. *Kiang Kang-hu*: "Chinese Civilization", Shanghai, China, 1935, Chapter X.

11. *B. C. Law*: "Buddhaghosh and his Works" (Thacker Spink & Co.), 1923.

*12. *N. Law*: "Promotion of Learning in India during the Muslim Rule" (Longmans, Green & Co.), 1916.

13. *Keay*: "Indian Education in Ancient and Later Times" (Oxford University Press), 1942.

*14. *Jaffar*: "Education in Muslim India" (S. Muhammad Sadiq Khan, Peshawar), 1936.

15. *Jaffar*: "Some Cultural Aspects of Muslim Rule in India" (S. Muhammad Sadiq Khan, Peshawar), 1939.

Paper II:

*1. *Robert Ulich*: "Three Thousand Years of Educational Wisdom" (Harvard University Press), 1947.

*2. *Paul Monroe*: "A Text-Book in the History of Education" (The Macmillan Co.), 1933.

*3. *H. G. Good*: "A History of Western Education" (The Macmillan Co.), 1948.

4. *E. P. Cubberley*: "The History of Education" (Constable & Co.), 1920.

*5. *A. E. Meyer*: "The Development of Education in the Twentieth Century" (Prentice-Hall), 1949.

6. *Eby and Arrowood*: (a) "History and Philosophy of Education—Ancient and Medieval; (b) "Development of Modern Education" (Prentice-Hall), 1949.

*7. *R. Rusk*: "The Doctrines of the Great Educators" (Macmillan & Co.), 1926.

GROUP V

EXPERIMENTAL EDUCATION

Paper I:

*1. *H. E. Garrett*: "Statistics in Psychology and Education."

*2. *R. A. Fisher*: "Statistical Methods for Research Workers."

3. *P. E. Vernon*: "The Measurement of Abilities."

*4. *Thomson*: "Factorial Analysis of Human Abilities."

Or

Burt: "Factors of the Mind."

5. *Thurstone*: "Primary Mental Abilities."

6. *W. P. Alexander*: "Intelligence Concrete and Abstract."

*7. *C. V. Good*: "Methodology of Educational Research."

Paper II:

*1. *Myers*: "Experimental Psychology."

*2. *Collins and Drever*: "A Laboratory Guide in Experimental Psychology."

*3. *Collins and Drever*: "Experimental Psychology."

4. *Kamat*: "Measuring Intelligence of Indian Children."

*5. *Burt*: "Mental and Scholastic Tests."

6. *Wilson and Hoke*: "How to measure in Education."

7. *Wynn Jones*: "An *Introduction* to the Theory and Practice of Psychology."

8. *C. W. Valentine*: "An *Introduction* to Experimental Psychology."

8. *Delhi*: The Delhi University provides for the degree of M.Ed. (partly by papers and partly by thesis). Its ordinances and regulations on the subject are given below:—

1. The examination for the Degree of Master of Education shall include—

Paper I.—Philosophy of Education (including Educational Sociology).

Paper II.—Advanced Educational Psychology (including experimental work).

Paper III.—Educational Administration or Principles of Curriculum Construction or Mental Hygiene and Child Guidance or Teacher Training.

Paper IV.—Experimental Education or Educational and Vocational Guidance or Comparative Education or History of Education.

Paper V.—Methodology of Educational Research.

Report on practical work or long essay in connection with Paper III or IV.

Candidates may do a dissertation on an approved educational subject under the direction of an approved supervisor, in lieu of Paper IV or V. Candidates offering a dissertation will be exempted from submitting the report or essay required for Paper III or IV. The topic for the dissertation has to be submitted for approval by the end of August.

Only such students as have obtained a First Class or Distinction in their B.A. or M.A. or B.T. Examination will be permitted to offer a dissertation.

2. Every candidate seeking admission to the examination for the Degree of Master of Education shall satisfy the following conditions:—

(a) He must have passed the Bachelor of Teaching Examination of the University of Delhi or any other examination accepted as equivalent thereto.

(b) He must after passing that examination have pursued a regular course of study as hereinafter prescribed for not less than one academic year, provided that this is preceded by at least three years' teaching experience in a recognised educational institution.

Provided further that the above condition regarding teaching experience may be waived at the discretion of the Head of the Department in the case of applicants whose standing in the B.T. examination and the preceding Degree examination justified this concession or who have had adequate research experience.

3. No candidate shall be considered to have pursued a regular course unless he is certified by the Principal of his College that he has satisfied the required conditions in respect of his instruction in the college.

4. The marks allotted for the various papers shall be as under:—

Paper I.—Philosophy of Education (including Educational Sociology) —one paper—100 marks.

Paper II.—Advanced Educational Psychology (including experimental work)—one paper—100 marks.

Paper III.—Educational Administration or Principles of Curriculum Construction or Mental Hygiene and Child Guidance or Teacher Training—one paper—100 marks.

Paper IV.—Experimental Education or Educational and Vocational Guidance or Comparative Education or History of Education—one paper—100 marks.

Paper V.—Methodology of Educational Research—one paper—100 marks.

Report on practical work or long essay in connection with Paper III or IV—one paper—50 marks.

Dissertation in lieu of Paper IV or V, with exemption from the report or essay—one paper—150 marks.

5. A candidate must obtain 50% of the aggregate marks to qualify for a pass and 65% to secure Distinction.

6. A candidate who fails to pass the examination may, subject to the Ordinance, be admitted to the examination again after a further period of at least one academic year as an ex-student or, if he so desires, on being re-admitted to a college.

7. A candidate who after completing the course for the Degree of Master of Education is, for some reason, prevented from taking the examination, may do so subsequently, without having to take the course again.

8. Each written paper shall be of three hours' duration.

8-A. The report or essay will be submitted in duplicate on or before the day of the commencement of the written examination and it will be examined separately.

9. The dissertation which should cover not more than a hundred pages, shall either be a record of original work or an ordered and critical exposition of existing data with regard to an approved educational subject.

10. A candidate shall not be permitted to submit as his dissertation one for which a Degree has been conferred on him at the University of Delhi or any other University.

11. The M.Ed. examination will ordinarily be held in April every year.

12. Each candidate must furnish not later than the 1st of May three type-written or printed copies of his dissertation.

13. If the examiners consider that a candidate's dissertation is adequate, but that he has not reached the required standard in the written portion of the examination, the candidate shall be exempted on re-entry from presentation of a dissertation. Similarly, if the examiners consider that the candidate has reached the required standard in the written portion of the examination but that the dissertation is not adequate, he shall be exempted, on re-entry, from the written portion of the examination.

14. The fee for each student shall be Rs. 75 for each entry to the whole examination. The fee payable on re-entry by candidates who

have been exempted either from appearing for the papers or from the presentation of dissertation shall be Rs. 40.

DETAILED SYLLABUS

PAPER I

Philosophy of Education (including Educational Sociology)

The scope and function of Educational Philosophy. Impact of modern philosophical thought on education. Aims and province of education. The scope and significance of Educational Sociology. Its relation to psychology, anthropology and education. Individual-group interaction and its outcomes. Family and other agencies of individual-group interaction. A critical study of fundamental problems of education, such as, school in relation to society, education and social change, education in relation to socio-economic and political systems, education for democracy, education for international understanding.

PAPER II

Advanced Educational Psychology (including Practical Work)

General principles and methods of experimental psychology and statistical treatment of educational data. Analysis of selected intelligence tests and their use. Personality and its assessment. Problems of backwardness and delinquency. Application of Psychoanalytic theories to education, Practical work.

PAPER III

(a) *Educational Administration*

Scope and purpose of Educational Administration. Central, Provincial and Local authorities connected with Educational Administration. Educational Finance. Administrative organization of supervision. Principles of Supervision. Techniques of Supervision and evaluation of its effectiveness. Relation between teaching and supervising staff. Uses of Educational research to an educational administrator. Problems of educational administration.

(b) *Principles of Curriculum Construction*

Objectives of Elementary and Secondary education; scope; techniques of curriculum development; subject matter; pupil-participation; correlation and integration; organizing the class for living and learning; provision for pupil needs and growth; developing units of work, time-tables and schedules; equipment and materials; quantitative standards and evaluation procedures; assessment of the traditional, craft centred and Moga curricula in India.

(c) *Mental Hygiene and Child Guidance*

The nature and function of mental hygiene. The individual—his nature and needs. Various explanations of problem behaviour. The

emotions and individual adjustment. Conflicts and adjustment. Non-school factors affecting adjustment. Factors of school adjustment. Use of diagnostic and remedial techniques. Case-study techniques: interview; individual and group therapy. Guidance as related to mental hygiene; its aims, organization methods and techniques. The organization of a child guidance clinic.

(d) *Teacher Training*

Need for training of teachers. General aims and objectives of teacher training. Scope of training. Types of training and their specific purposes. Selection of trainees. Curriculum of teacher training. Relation between theory and practice. Supervision of instruction. Organizational set-up of teacher training institutions. Practising and Experimental Schools; their organisation. Evaluation of training. Teacher training in Great Britain and U.S.A.

PAPER IV

(a) *Experimental Education*

Construction, standardisation, application and administration of Mental and Scholastic Tests. Factors determining their discriminative efficiency, validity and reliability. Principles of Factorial Analysis of Mental abilities. Application of statistical methods to educational data. Problems of examination. Analysis of variance and its application to educational problems. Problems of selection for secondary technical and university education.

(b) *Educational and Vocational Guidance*

Need for Guidance. Types of Guidance activities. General principles of Guidance. Statistical background of Guidance. Study of individuals; measuring intelligence, achievements, aptitudes, interests, personality; cumulative record card. Study of occupations: job analysis, job description, collecting and disseminating occupational information. Problems of matching individuals and jobs. Case work in Guidance. Organization of Guidance Services.

(c) *Comparative Education*

A comparative study of the general educational set-up (with basic principles) of the following countries:—

(*a*) Britain, (*b*) U.S.A. or Russia.

and

Comparative study of rural education in Canada or U.S.A., and China,

or

Comparative study of Vocational education in Great Britain and U.S.A. or Russia,

or

Comparative study of Further Education in Denmark or Sweden, and Great Britain or China.

(d) *History of Education*

A. History and progress of education in India since 1800

and

B. (*One* of the following):

Education in ancient India or ancient Greece or Medieval masters of western education; or

Education in England from 1832.

PAPER V

Methodology of Educational Research

Need for research in education. Fields of educational research. Methods of educational research. Types of experimental designs. Selection and definition of a problem. Survey of related information. Formulation of hypotheses. Collection of data. Sampling in educational research. Treatment of data. Elements of Educational statistics. Formulation of conclusions and generalisations. Preparation of the research report.

LIST OF BOOKS RECOMMENDED

No text-books are prescribed. The following books are recommended to guide the students in their study.

Paper I.—*Philosophy of Education (including Educational Sociology).*

(1) *Henderson*: Introduction to the Philosophy of Education (Univ. of Chicago Press).

(2) *Adams*: Evolution of Educational Theory (Macmillan).

(3) *Brubacher*: Modern Philosophies of Education (McGraw-Hill).

(4) *Brown*: Educational Sociology (Technical Press).

Paper II.—*Advanced Educational Psychology (including Experimental work).*

(1) *Skinner*: Educational Psychology (Prentice-Hall).

(2) *Mitchell*: Problems in Psychopathology (Kegan Paul).

(3) *Andrews*: Methods in Psychology (John Wiley).

(4) *Burt*: Young Delinquent (U.L.P.).

(5) *Murray*: Explanations in Personality (Oxford).

Paper III.—*Any one of* (a), (b), (c) *or* (d) *given below.*

(a) *Educational Administration*:

(1) *Barr, Burton and Brueckner*: Supervision (Appleton).

(2) National Society for the Study of Education: Changing Conception in Educational Administration (Univ. of Chicago Press).

(3) *Melby*: Organization and Administration of Supervision (School Pub. Co.).

(4) *Nutt*: Supervision of Instruction (Heath).

(b) *Principles of Curriculum Construction* :

(1) *Caswell and Campbell* : Curriculum Development (American Book Company).

(2) *Lane* : The Progressive Elementary School (Houghton Mufflin).

(3) *Otto* : Principles of Elementary Education (Rinehart).

(4) Report on Curriculum and Examinations in Secondary Schools (H.M.S.O.).

(c) *Mental Hygiene* :

(1) *Rivlin* : Education for Adjustment (Appleton).

(2) *Crow and Crow* : Mental Hygiene in School and Home Life (McGraw-Hill).

(3) *Burbury, Balint and Yapp* : An introduction to Child Guidance (Macmillan).

(d) *Teacher Training* :

(1) Teachers for Democracy. Fourth year-book of the John Dewey Society (Appleton).

(2) Teachers and Youth Leaders, Part I (H.M.S.O., London).

(3) Bureau of Education, India, Pamphlet No. 19; Report on the Training Recruitment and Condition of Teachers.

(4) *Martin* : Into the Breach (Turnstile Press).

Paper IV.—*Any one of* (a), (b), (c), *or* (d) *given below.*

(a) *Experimental Education* :

(1) *Vernon* : Measurement of Abilities (U.L.P.).

(2) *Garrett* : Statistics applied to Education and Psychology (Longmans).

(3) *McCall* : Measurement (Macmillan).

(4) *Thomson* : Factorial Analysis of Human Ability (U.L.P.).

(5) *Lindquist* : Statistical Analysis in Educational Research (Houghton Mifflin).

(b) *Educational and Vocational Guidance* :

(1) *Meyers* : Principles and Techniques of Vocational Guidance (McGraw-Hill).

(2) *Bingham* : Aptitude and Aptitude Testing (Harper).

(3) *Williamson* : How to counsel students (McGraw-Hill).

(4) Guidance in Educational Institutions (37th year-book of the National Society for the study of Education).

(c) *Comparative Education* :

(1) *Hans* : Comparative Education (Kegan Paul).

(2) *Barnard* : A Short History of English Education (U.L.P.).

(3) *Rugg* : Foundations for American Education (World Book Co.).

(d) *History of Education*:

(1) *Nurullah and Naik*: History of Education in India, British Period (Macmillan).

(2) *Mukherji*: Ancient Indian Education (Macmillan).

(3) *Eby and Arrowood*: History and Philosophy of Education, Ancient and Medieval (Prentice-Hall).

(4) *Barnard*: A Short History of English Education (U.L.P.).

Paper V.—*Methodology of Educational Research.*

(1) *Good, Barr and Scates*: Methodology of Educational Research (Appleton).

(2) *Abelson*: The Art of Educational Research (World Book Co.).

(3) *Oliver*: Research in Education (George Allen & Unwin).

9. *Karnatak University* This University has the same course as that of the Bombay University (old course). This has already been given in section 6 above.

10. *Lucknow University*: The Education Section of the *Department of Philosophy and Education* of the Lucknow University was inaugurated in 1944 with a *post-graduate* degree in Education called 'Bachelor of Education Science' (B.Ed.Sc.). This course comprised four papers on educational subjects and one examination in Experimental Psychology specially in relation to Education. But from the current year one more paper has been added and the degree will now be known as *Master in Education* (M.Ed.). It is a one year's course open only to those who are already graduates and hold a diploma or a degree in Education. The following papers constitute the M.Ed. course:

1. Philosophy of Education.
2. Advanced Educational Psychology.
3. Comparative Education.
4. Abnormal Psychology as Applied to Education.
5. One of the following options:—
   (1) Mental deficiency and moral amentia.
   (2) Neurosis among school children.
   (3) Deaf-mutism and speech defects.
   (4) Vocational guidance and selection

or

Thesis.

6. Practical work.

The *Regulations* for the course are given below : —

1. Admission to the courses for the Degree of Master in Education shall be restricted to the graduates of the Lucknow University or any other recognised University.

2. The courses of study shall extend over a period of two academic years.

3. Graduates possessing a Degree or Diploma in Teaching or an equivalent qualification from a recognised University shall be exempted from the first year's course.

4. The Degree of Master in Education shall be conferred on candidates who have pursued a regular course of study in the University and have fulfilled the conditions laid down for the residence of students and have passed the prescribed examination.

5. The examination for the second year's course shall consist of four papers and practical work.

6. Names of successful candidates shall be arranged in three divisions, to be arranged in alphabetical order within the division, as under : —

First division candidates obtaining 60 per cent and over of the aggregate.

Second division candidates obtaining below 60 per cent but not less than 50 per cent.

Third division candidates obtaining below 50 per cent but not less than 40 per cent.

7. A "regular course of study" means attendance at not less than 75 per cent of the lectures and of the practical exercises constituting the course of study.

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone a shortage of attendance to the extent of six lectures and six practical classes.

8. Students who have completed their course for the M.Ed. Examination but have failed to pass or to appear at the examination, may be permitted to appear at the same examination, in the following year, without further attendance at lectures if their applications for permission meet with the approval of the Head of the Department of Philosophy and the Dean, Faculty of Arts ; provided that a student who failed in the practical shall be required to undergo (after the April examination) a fresh course of practical training at the University during the Dasehra or Christmas recess on payment of a fee of Rs. 20 for which training the University shall provide suitable arrangements.

Provided further that students, who pass in the practical examination but fail in written papers only, may be permitted to appear at the next examination without further attendance at practicals or lectures.

Candidates allowed to appear at the M.Ed. examination under this Ordinance shall be required to pay the full examination fee of Rs. 50.

A student who fails to pass the M.Ed. examination, after having been permitted under this Ordinance, shall, if appearing in a subsequent examination, be required to undergo a fresh "regular course of study".

9. A student who has already passed the B.Ed.Sc. Examination from the Lucknow University may be awarded the degree of 'Master of Education' if he appears and is successful at a subsequent examination in two papers of M.Ed., or a thesis, viz.:

(1) Philosophy of Education—Paper I.

(2) Comparative Education—Paper III.

or Thesis.

(*a*) The fee for this examination under this Ordinance will be Rs. 30.

(*b*) A student who fails to pass will be required to undergo a fresh regular course of study.

(*c*) The thesis under this Ordinance will be for 200 marks.

(*d*) Students passing under this Ordinance will be awarded a Pass degree.

10. The Scheme of Examination will be as follows:—

Five Papers, or a thesis in lieu of Paper V, each	100 marks.
Practical Test	100 marks.
Time allowed for each Paper—3 hours.	
Minimum pass marks in each Paper	30 per cent.
Minimum pass marks in Practical Test	40 per cent.
Minimum pass marks in the aggregate of Written and Practical examinations	40 per cent.

11. The *Syllabuses* and *Books Recommended* are given below:—

FOR THE EXAMINATIONS OF 1951 AND AFTER

Paper I.—*Philosophy of Education*:

Aims; Philosophy of Education in relation to Social Sciences; Idealism, Humanism, Realism, Naturalism, Pragmatism; Philosophy and the Democratic Process; Philosophy of Education and the Character of the State; Education and Religion.

BOOKS RECOMMENDED

Adams: Evolution of Educational Theory.

Kandel: Conflicting Theories of Education.

Horne: Philosophy of Education, Idealism in Education.

Whitehead: Aims of Education.

Dewey: Democracy and Education.

Hardie: Truth and Fallacy in Educational Theory.

Bode: Modern Educational Theories.

Brubacher: Modern Philosophies of Education.

Brubacher: A History of the Problems of Education.

Paper II.—*Advanced Educational Psychology* with special reference to statistical methods in their application to education and the principal forms of educational measurements. Their value and critique. Varieties of mental tests and their special technique. Measurement of individual differences. Personality testing.

BOOKS RECOMMENDED

Hollingworth: Educational Psychology.

Gates and others: Educational Psychology.

Kelley: Interpretation of educational measurement.

Cattell: A Guide to Mental Testing.

Anastasi: Differential Psychology.

Hull: Aptitude Testing.

MacCall: How to Measure in Education.

Link: Employment Psychology.

Garrett: Statistics in Psychology and Education.

Woodworth: Experimental Psychology.

Eurich and Carrol: Educational Psychology.

Paper III.—*Comparative Education*:

The purpose of this paper is to make a comparative study of the present educational system in India, United Kingdom, U.S.S.R., U.S.A., France and Germany, with special reference to (*a*) Aims, (*b*) Organisation, (c) Finance, (*d*) Methods, and (*e*) their distinctive features.

BOOKS RECOMMENDED

Kandel: Comparative Education.

Sandiford: Educational Systems.

Beatrice King: Russia Goes to School.

Roman: New Education in Europe.

Strayer and Thorndike: Educational Administration.

Educational Year-Books published in England, India and U.S.A.

Hans: Comparative Education.

Stead, H. G.: Modern School Organisation.

Paper IV.—*Abnormal Psychology* as Applied to Education with special reference to Backward Children, Temporary and Durable Retardation, Mental Deficiency, Moral Amentia, Pathological Traits in School Children, Neurosis in School Children. The Blind and the Deaf-mutes.

Causes and Methods of Treatment. Educational Methods for the Subnormal Group.

BOOKS RECOMMENDED

Tredgold : Mental Deficiency.

Duncan : Mental Deficiency.

Shuttleworth and Potts : Mentally Deficient Children.

Hollingworth : Special Talents and Defects.

Gray : Nation's Intelligence.

Cattell : Fight for our Nation's Intelligence.

Bonner : Psychology of Special Abilities and Disabilities.

Inskip : Teaching of Dull and Retarded Children.

Burt : The Backward Child.

McDougall : Outlines of Abnormal Psychology.

Hollingworth : Psychology of Sub-normal Children.

Burt : The Young Delinquent.

Moss and Hunt : Foundations of Abnormal Psychology.

Binet : Intelligence of the Feeble-minded.

Goddard : Feeble-mindedness.

Paper V.—*One* of the following options or *thesis* :

(1) Mental Deficiency and Moral Amentia.

(2) Neurosis among School Children.

(3) Deaf-mutism and Speech Defects.

(4) Vocational Guidance and Selection.

Vocational Guidance Syllabus :

Its Nature and Purpose ; Varieties of Guidance ; Distinction between Vocational Guidance and Selection ; Need for Vocational Guidance ; Its Origin and Development ; Basic Assumptions, Value and Critique of Different Methods in Guidance ; the School and its Relation to Vocational Guidance.

The Services in a Vocational Guidance Programme ; Study of Occupations and Occupational Information ; Self-Inventory ; Data-collecting about the Individual ; Physical, Medical and Intelligence Rating, Special Aptitudes, Interests, Personality Traits, etc. ; Conselling ; Interview, Preparatory Service, Placement, Follow-up or Adjustment.

BOOKS RECOMMENDED

G. E. Myers: Principles and Techniques of Vocational Guidance.

A. J. Jones: Principles of Guidance.

Keller and Viteles: Vocational Guidance Throughout the World.

Earle: Methods of Choosing Career.

Bingham: Aptitudes and Aptitude Testing.

Hollingworth: Vocational Psychology and Character Analysis.

Macrœ: Talents and Temperaments.

Oakely and Macree: Handbook of Vocational Guidance.

I.L.O. Report on Vocational Guidance.

Kaplan: Encyclopedia of Vocational Guidance, 2 Vols.

VI.—*Practical Work—A.—Experiments*:

Two-point Limen—By method of Limits.

Time Estimation empty intervals—Method of Reproduction (Short and Long).

Binocular Vision—Stereoscopy.

Image Type—(1) Kræpelin's Method, and (2) Smith's Method.

Fatigue—Ergography.

Learning Cure—(1) Non-sense Syllables, and (2) Non-sense Figures Geometrical.

Memory Curve—Non-sense Syllables (Learning and Savings method).
Fluctuation of Attention—(With Mason's Disc).

Diagnostic Association—Kent Rosanoff List.

Visual Motor Co-ordination: (1) Card-sorting, and (2) Form-Board.

B.—Tests: Intelligence Tests (for secondary classes), Performance Tests (for secondary classes), Achievement Tests (English, Mathematics, languages), Reading Tests, Spelling Tests of Ability (professional and academic).

BOOKS RECOMMENDED

Titchener: Experimental Psychology, Vols. I and II.

Myers: Text-Book of Experimental Psychology, Vols. I and II.

Collins and Drever: Experimental Psychology.

Whipple: Manual of Physical and Mental Tests, Vols. I and II.

Woodworth: Experimental Psychology.

11. *Madras University*: The Madras University provides for the M.Ed. Examination partly by papers and partly by thesis. Its regulations on the subject are given below:—

1. No candidate shall be admitted in the course unless he has taken the B.T. Degree of this University or a Degree in some other University accepted by the Syndicate as equivalent thereto.

The course may be taken immediately after the B.T. course or equivalent course; or after an interval of some years, provided the applicant has been engaged in teaching for at least (*a*) one year if the interval between the two courses is not more than three years, and (*b*) one-third of the interval in the case of an applicant who has had an interval of more than three years between the two courses. (In this connection the word 'teaching' connotes also inspection.)

No candidate shall be eligible for the Degree of M.Ed. unless he has completed the prescribed course of study and has passed the qualifying examination and has satisfied the examiners in a thesis on an approved subject.

2. The course of study which shall last for one academic year, shall include—

A.—Educational Psychology with emphasis on Experimental Education.

B.—Educational Organisation and Administration.

C.—History of Education.

D.—Current Problems in Indian Education—Six problems to be specified by the Department from time to time.

E.—Thesis—Candidates shall be required to submit a thesis in a subject approved by the University. The thesis shall be prepared under the direction of a Teacher approved by the University and submitted two weeks before the M.Ed. Degree Examination.

The subject proposed for the thesis shall be submitted to the University for approval not later than the 31st August.

3. The subjects and the scheme of examination shall be as follows:

	Hours	Marks
(1) Educational Psychology	3	100
(2) Educational Organisation and Administration	3	100
(3) History of Education	3	100
(4) Current Problems in Indian Education	3	100
(5) Thesis		
Total		400

A report on the practical work of each student in Psychology shall be submitted to the Board of Examiners by the Lecturer concerned.

4. Candidates shall be declared to have passed the examination if they obtain not less than 50 per cent of the marks in each of any two

of the papers and not less than 35 per cent in each of the remaining papers and have satisfied the Examiners in the thesis.

5. A candidate shall not be permitted to appear for the M.Ed. Degree Examination on more than two occasions.

A candidate who has failed in the Written Test or in the Thesis may re-appear for the M.Ed. Degree Examination once only in the Written Test or submit a Thesis, as the case may be, at the next succeeding examination, provided, however, it shall be competent for the Syndicate, if the Advisory Board so recommends, to permit the candidate, in exceptional circumstances, such as illness, to take the Written Test or submit a fresh Thesis on a later occasion.

A candidate who has failed in the Written Test only shall not be required to put in any additional attendance before reappearing for the written examination; and a candidate whose Thesis has failed to reach the prescribed standard shall be required to submit a Thesis only, which shall be on a different subject. Such a candidate shall be permitted to submit the French Thesis only after the production of an additional attendance certificate for one term in a college where the course is organised.

SYLLABUSES

A.—EDUCATIONAL PSYCHOLOGY (THEORY AND PRACTICAL)

1. *Introduction*:

A.—Schools of Psychology: The introspective schools—Behaviourism —Gestalt Psychology—Psycho-analysis—Purposivism.

B.—Methods of collecting data.

C.—Statistical Methods:

(*a*) The Frequency Distribution.

(*b*) Graphic methods and normal curve.

(*c*) Reliability of measures.

(*d*) Correlation.

2. *The Inheritance of Human Traits*: Heredity—Laws of Heredity—Social Heredity.

3. *The General Development of the Child*: Physical and mental (including the nervous system).

4. *The Development of the Special Mental Powers of the Child*:

A.—Sensation: (*a*) Vision, (*b*) Audition, (*c*) Tactual sensation, (*d*) Taste, (*e*) Smell, (*f*) Kinaesthetic sensation, (*g*) Sense of equilibrium, (*h*) Organic sensation.

B.—Perception: (*a*) Perception of space, (*b*) Auditory space, (*c*) Illusions in space Perception, (*d*) Perception of movement, (*e*) Rhythm, (*f*) Perception of time, (*g*) General Laws of perception.

C.—Instinct.

D.—Attention.

E.—Memory.

F.—Reasoning.

G.—Imagination and dreams.

H.—Feeling and affection.

I.—Emotion and temperament.

5. *Tests* of (*a*) Physical and Sensory capacities, (*b*) Motor ability and mechanical aptitude, (*c*) Perception, (*d*) Attention, (*e*) Memory, (*f*) Imagery.

6. *The Learning Process*:

A.—Conditioned stimuli and conditioned reactions.

B.—Laws of Learning.

C.—Improvement in Learning.

D.—The permanence of Improvement: Remembering and Forgetting.

E.—Continuous Practice: Fatigue in Learning.

F.—Transfer of Training.

7. *The Measurement of Improvement*: Educational tests—Standardised Tests in special subjects—Reading, handwriting, spelling, arithmetic, etc.

8. *Individual Differences*: Physical—Temperamental—Intellectual—Difference between sexes—Individual differences and vocational guidance.

9. *Intelligence*: Its nature and measurement—The Nature of Intelligence—The Concepts of "G" and "S"—The Growth of Intelligence—History of Intelligence Testing—Standardisation of Tests—Individual and Group Tests—Verbal and Non-Verbal Tests—Uses of Intelligence Tests.

10. *The Backward Child and the Difficult Child—the Gifted Child.*

11. (*a*) The measurement of Personality and Temperament.

(*b*) Experimental Aesthetics and Art Judgment.

(*c*) Psychological Tests in Music.

(*d*) The detection of suppressed ideas.

B.—EDUCATIONAL ORGANISATION AND ADMINISTRATION

I. The 19th century and the movement for national education—A National system: an expression of the national genius—Influence of historical, geographical, ethnological, political and economic factors on the systems of education in England, U.S.A., Germany, Italy, Russia, France and Japan. The aim of a national system of education—Indian Education from this point of view.

II. *Education policy*: (1) Aims, (2) Free and compulsory education at different stages, (3) Private and State education.

III. *Educational Control and Management*: Educational authorities—Central, Provincial, and Local. The organisation and functions of managing bodies.

IV. *The Work of the Headmaster*: Co-operation with staff—allocation of work—distribution of staff—supervision—classification and promotion of pupils—discipline—extra-curricular activities—relations with parents and the community—school records, registers and returns.

V. *The Work of the Inspector*: Supervision and inspiration—co-operation with school authorities (management and staff)—methods of evaluation of the work of the school as a whole and of individual teachers—encouragement of experiments—co-ordination and sharing of experience.

VI. *Educational Finance and its Administration*:

(1) Sources of income—State and private—Central, Provincial and Local—Endowed and provided.

(2) Grants-in-aid.

(3) Free places and Scholarships.

VII. *Educational Service*:

(1) Central Board of Education.
(2) Research and Statistics.
(3) Museums.
(4) Libraries.
(5) Bureaus.
(6) Publications.
(7) Exhibitions.
(8) Broadcasting.
(9) Film and Lantern Libraries.

VIII. *Classification of Schools*:

A. (1) Nursery, (2) Infant, (3) Primary, (4) Secondary.

B. (1) Rural, (2) Urban.

C. (1) Agricultural, (2) Commercial, (3) Technical, (4) Industrial.

D. Special schools—schools for girls, for adults, for defectives.

IX. *Curricula*:

(1) Agencies for formulating curricula—Principles of the curriculum—Differentiation on curricula to suit different types of schools.

(2) Text-books—Principles and agencies of prescription.

X. *The Teacher*: Selection and training—Salaries, pensions and terms of service—Professional Organisations, National and International —Professional Etiquette.

XI. *The External Examination.*

XII. *Education and Unemployment.*

XIII. *Trends in Post-War National Education abroad and current tendencies in India.*

C.—HISTORY OF EDUCATION

I. *Western.*

A.—*Greek and Roman Education.*

(i) Education for citizenship.

(ii) Individualism of later Greek Education.

(iii) Practical aspects of Roman Education.

(iv) Graeco-Roman Education.

B.—*Education as Discipline.*

(i) (*a*) Monasticism, (*b*) Chivalry, (*c*) Scholasticism, followed by Dark Ages.

(ii) Humanistic Education, its rise and decay into narrow Humanism.

(iii) John Locke.

C.—*Naturalistic Tendency in Education.*

Naturalistic phase of 18th Century thought.

Rousseau's " Emile ", Basedow.

D.—*Psychological Tendency in Education.*

(i) Its characteristics.

(ii) Stages as seen through the work of personalities.

(*a*) Pestalozzian movement. Philanthropic Education, Education and development.

(*b*) Herbart's contribution.
Ideal of Education as Moral Man—Character.
Method based on " Fusion of Ideals ".

(*c*) Froebelian Movement.
Law of Unity, Self-activity, Kindergarten.

(*d*) Montessori (Fusion of Psychological and Scientific tendencies).

(iii) Influence on Content, Method, Discipline, Aim, Type of Institutions.

E.—*Herbert Spencer and Scientific Tendency in Education.*

F.—*Sociological Tendency in Education.*

Sociological aspect of Pestalozzi, Herbart, Froebel.

Influence of the Viewpoints of Statesmen and Publicists, Frederick the Great, etc.

G.—*Politico-Economic Tendency in Modern Education.*

Adapting Education to Political and Economic needs.

H.—*Eclectic Tendency.* Fusion of (1) Psychological, (2) Scientific, (3) Sociological Tendencies.

II. Indian.

A.—*Ancient India.*

Vedic Education: Mass Education. Buddhistic Education. Sankaracharya, Growth of Prakrit and decay of Mass Education.

B.—*Muslim Education.*

(i) In Urban centres only—Influence of Hindu Learning.

(ii) Work of Firozshah, Akbar, Aurangazeb.

C.—*Western Influences.*

(1) Missionary efforts.

(2) State aid and encouragement to Oriental Learning.

(3) Demand for change: Period of Controversies (1800-1854). Raja Ram Mohan Roy, Elphinstone, Monroe, Perry, Macaulay, Wood's Despatch.

D.—*Educational Policies.*

(i) Primary and Mass Education—Hunter Commission, District Local Boards Acts (1882-1886), Hon. Gokhale's Demand in Central Legislative Councils, Primary Education Acts of various provinces, 1920 and after, the Hartog Report.

(ii) Higher Education—the Sadler Report, the Hartog Report, the Lindsay Report, the Abbot and Wood Report.

E.—*Recent Revivals and Experiments.*

Gurukul, Sabarmati, Shantiniketan, Moga, Wardha Scheme, Vocational Education.

F.—*Outlines of the History of Physical Education.*

G.—*Outlines of the History of Vocational Education.*

12. *Mysore University*: The Mysore University has instituted the M.Ed. degree very recently. Its regulations on the subject, as supplied by the Principal of the Training College, Mysore, are given below:—

1. *Qualification for Admission*: A candidate for admission to the M.Ed. course shall have taken the B.T. Degree of this University, or a corresponding degree of any other University accepted by the University Council as equivalent thereto.

The course may be taken after the B.T. Degree or any equivalent degree after an interval of not less than one year spent in teaching or supervision in recognised schools.

2. *Course—duration of*: The M.Ed. examination shall be taken in two parts:—

(i) The qualifying examination after completing the prescribed course at the end of the first year.

(ii) The final degree examination by submitting a Thesis at the end of the second year.

3. *Courses of study for the Qualifying Examination*: The courses of study * for the qualifying examination shall consist of:—

A. *Compulsory*:

(1) Methods of Educational Research.

(2) Problems of Indian Education.

B. *Optional*—Any two of the following:

(1) Educational Statistics.

(2) Educational Organisation and Administration.

(3) Advanced Educational Psychology.

(4) Educational Movements abroad.

4. *Scheme of Examination*: There shall be four papers of 3 hours' duration each, with a maximum of 100 marks each. The candidates shall be declared to have passed the qualifying examination if they obtain not less than 40% in each of the papers and not less than 50% in the aggregate.

5. *Thesis*: The candidates declared to have passed the qualifying examination, shall prepare a thesis, in any approved subject, under the direction of a supervisor appointed by the University and shall submit the same not earlier than one year after the qualifying examination.

There shall also be a *Viva-Voce* Examination.

6. *Valuation of the Thesis*: The University Council shall in consultation with the Board of Studies in Teaching appoint a board of three examiners one of whom shall be a member of the teaching staff of the department of teaching, other than the one under whose guidance and supervision the thesis was prepared.

The Board of Examiners shall hold a Viva-Voce Examination for the candidates whose theses are referred to and shall report the result of the examination to the University.

7. *Fees*:

(*a*) The Tuition fee shall be Rs. 120 for the qualifying course.

(*b*) The Examination fees shall be

(1) Qualifying Examination Rs. 40.

(2) Fee to be sent along with the thesis for the Degree Examination Rs. 60.

* The details of these courses were not available.

8. *General*: Rules relating to the submission and publication of the thesis offered for the Master's Degree Examination in other subjects shall apply also to the thesis offered for the Master's Degree in Education.

13. *Nagpur University*: The Nagpur University provides for the M.Ed. Degree (by papers and thesis). Its regulations on the subject are given below:—

1. (*a*) Any graduate in Arts or Science of a recognised University who has been admitted to the degree of Bachelor of Teaching of Nagpur University or to a degree recognised by Nagpur University as equivalent thereto for the purpose of this Ordinance, viz. the B.T. degree of the University of Calcutta or Bombay may, subject to the provisions of this Ordinance, offer himself as a candidate for the degree of Master of Education:

Provided that he shall have passed the examination for the degree of B.T. or its equivalent in the first or second division both in theory and in practice.

(*b*) In exceptional cases, a person not eligible under clause (*a*) of this paragraph may, on the recommendation of the Faculty of Education, be permitted by the Academic Council to offer himself as a candidate for the degree: provided that

(i) he has passed in the first or second division the Examination for the M.A. or M.Sc. degree of the University or for the degree of another university recognised by the University as equivalent thereto, for the purpose of this Ordinance, and has been admitted to the degree; and

(ii) he holds a Diploma or a certificate in Teaching, which, in the opinion of the Faculty of Education, is of a sufficiently high standard.

2. The Examination for the degree shall be held annually at Jubbulpore on the third Monday in March or on such other date as may be appointed by the Academic Council in this behalf, the said date being notified in the *Central Provinces and Berar Gazette* not less than six months before the commencement of the examination.

3. The examination shall consist of two parts as follows, viz.—

Part I.—A written examination in:—

(1) Principles of Education.

(2) Practice of Education.

(3) and (4) Two of the following, viz.—

(i) Educational Psychology.

(ii) Experimental Pedagogy.

(iii) Social Philosophy.

(iv) History and Present State of Education in India.

(v) History of Education in Europe.

(vi) Comparative Study of Present-day Educational Systems.

Part II.—A thesis embodying the results of individual research in one of the subjects offered for Part I of the examination.

4. One paper shall be set in each of the subjects for Part I of the examination, the maximum marks for each paper being 100.

The scope of the subjects for Part I of the examination shall be indicated in the Prospectus of examinations.

5. (i) Not less than two years before the date on which the candidate proposes to take the examination, he shall submit an application to the Registrar for approval by the Faculty of Education, of (*a*) the specific subject of the thesis for Part II of the examination, (*b*) the person under whose direction, and (*c*) the institution or place in which he proposes to prosecute his research for the thesis. If the Faculty approves the subject, person and institution proposed, it may prescribe such further conditions, if any, for the prosecution of the research, as it deems fit. The application submitted under this paragraph shall be accompanied by a fee of rupees ten, which shall not be refunded under any circumstances:

Provided that in the case of a candidate who is not a graduate of Nagpur University, his research work shall be prosecuted under the direction of a teacher in Nagpur University or a person residing in the Central Provinces and Berar and in an institution in the Central Provinces and Berar.

(ii) On prosecution of the research for a period of not less than eighteen months, the candidate shall submit three printed or typewritten copies of his thesis to the Registrar so as to reach him not later than the 10th January of the year in which he proposes to take the examination.

(iii) The candidate shall submit with the thesis—

(*a*) a certificate from the person under whom he has prosecuted his research, stating:—

(1) that the candidate has satisfactorily prosecuted his research for a period of not less than eighteen months under conditions approved or prescribed by the Faculty of Education;

(2) that the thesis submitted by the candidate is the result of original work and is of a sufficiently high standard to warrant its presentation for examination; and

(*b*) a declaration that the thesis has not been previously submitted by him for a degree of any University.

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(iv) The thesis shall be satisfactory in respect of literary presentation as well as in other respects and shall be in a form suitable for publication.

(v) The candidate shall indicate generally in the Preface to his thesis and specially in notes, the sources from which his information is taken, the extent to which he has availed of the work of others and the portions of his thesis which he claims to be original. He shall further state specifically the conclusion reached as a result of his investigations.

(vi) A candidate may submit in support of his candidature any printed contributions to the advancement of any of the subjects of examination which he may have previously published independently or conjointly.

6. Every application for admission to the examination shall be in the form prescribed by the Academic Council and shall reach the Registrar at least five months before the commencement of the examination in Part I. It shall be accompanied by a fee of Rs. 100. A candidate who fails to pass or to present himself for examination, or to submit his thesis, shall not be entitled to a refund of the fee.

7. In order to be successful at the examination (*a*) a candidate shall obtain not less than forty per cent of the aggregate marks obtainable in Part I of the examination; and (*b*) his thesis for Part II shall have been approved by the Executive Council on the recommendation of the examiners appointed in this behalf.

8. (*a*) The thesis submitted for Part II of the examination shall be referred for report to two examiners. The Faculty of Education shall propose to the Academic Council at least two persons for appointment as examiners for the thesis and after considering such proposal the Academic Council shall recommend to the Executive Council two persons for appointment as examiners. The candidate may be required at the discretion of the examiners, to present himself at a place approved by the Vice-Chancellor to be tested orally with reference to his thesis.

(*b*) In the event of a difference of opinion between the two examiners, the Executive Council shall appoint a third examiner to whom the thesis shall be referred. His decision shall be final.

9. The name of the successful candidates shall be published by the Executive Council in the *Central Provinces and Berar Gazette*, together with the subject of the thesis and titles of published contributions, if any, submitted with the thesis by the candidate.

10. A candidate who fails in Part I of the examination may again present himself for examination in that Part in any subsequent year. A candidate who fails in Part II may either (*a*) re-submit his original thesis in an amended form or (*b*) submit a fresh thesis on a different subject, under such conditions as the Faculty of Education may pres-

cribe. In the case of admission to one or both parts of the examination, a fresh fee of Rs. 110 shall be paid to the University by the candidate.

11. Every candidate is entitled to publish his thesis for the examination.

BOOKS RECOMMENDED

Principles of Education :

T. P. Nunn : Education, Its Data and First Principles.

J. Findlay : Principles of Education.

J. Adams : The Evolution of Educational Theory.

T. E. Shields : Philosophy of Education.

J. Dewey : Democracy and Education.

J. Dewey : The School and Society.

E. N. Henderson : A Text book in the Principles of Education.

F. W. Thomas and A. R. Lang : Principles of Modern Education.

Practice of Education :

J. Adams : Modern Developments in Educational Practice.

J. Dewey : Experience and Education.

R. C. McCarthy : Training the Adolescent (Bruce).

W. G. Sleight : Educational Values and Methods.

F. Smith and A. S. Harrison : Principles of Class Teaching.

M. Montessori : The Montessori Method.

Kimmins and Rennine : The Triumph of the Dalton Plan.

P. B. Ballard : The Changing School.

Educational Psychology :

Sandiford : Educational Psychology.

Spearman : The Nature of Intelligence and the Principles of Cognition.

M. Maher : Psychology (Longmans Green & Co.).

De La Vaissiere : Educational Psychology (Herder Book Co.).

R. Allers : The New Psychologies (Sheed and Ward).

Adler : Education of Children.

Mcdougall : Energies of Men.

Susan Isaacs : Intellectual Growth in Young Children.

Experimental Pedagogy :

Spearman : The Abilities of Man.

T. L. Kelley : Crossroads in the Mind of Man.

Hamley (Editor) The Testing of Intelligence.

C. L. Hull : Aptitude Testing (New York).

Gesell: Mental Growth in the Pre-School Child.

Rugg: Statistical Methods Applied to Education (Harrap).

Murchison (Editor) : The Foundations of Experimental Psychology.

Murchison (Editor) Handbook of Child Psychology.

Social Philosophy:

Graham Wallas: The Great Society.

F. Sheed: Communism and the Man (Sheed and Ward).

E. J. Ross: A Survey of Sociology (Bruce).

J. Francis Haas: Man and Society (Centenary Co., New York).

A. Muntsch and Spalding: Introductory Sociology (Health & Co.).

History and Present State of Education in India (from 1780):

H. Sharp and J. Richey: Selections from Education Records, Vols. I and II.

H. James: Education and Statesmanship in India.

A. Mayhew : The Education of India.

Meston: Indian Educational Policy.

Seshadri: The Universities of India.

J. M. Sen: Elementary Education in India.

M. R. Paranjpe: Selections from Indian Educational Records (Mac-Millan).

The following reports should be consulted:—

(i) The Calcutta University Commission Report, Vols. I, II & III.

(ii) The Hartog Committee Report.

(iii) Vocational Education in India (Abbott and Wood Report).

(iv) Zakir Husain Committee Report.

(v) Reports issued by the Central Advisory Bureau, and the Government of India.

History of Education in Europe:

Monroe: Text Book in the History of Education.

Graves: A History of Education—(i) Before the Middle Ages; (ii) During the Middle Ages; and (iii) Great Educators of Three Centuries.

Rusk: Doctrines of Great Educators.

Quick: Essays on Educational Reformers.

Plato: Republic (Jowett's translation).

Rousseau: Emile (Payne's translation).

COMPARATIVE STUDY OF PRESENT DAY EDUCATIONAL SYSTEMS

A Study of the Modern Educational Systems of England, France, Germany, U.S.A., and Soviet Russia:

I. Kandel: Studies in Comparative Education (1934) (Harrap).

F. W. Roman: The New Education in Europe (1930).

E. Percy (Editor) The Year Book of Education (1932) (Evans Bros., London), (issued by the International Institute of Teachers' College, Columbia University) (Latest Edition).

I. L. Kandel (Editor) The Educational Year-Book.

A. P. Pinkevitch: The New Education in the Soviet Republic (Williams and Norgate).

E. P. Cubberley: Public Education in the United States.

G. N. Lowndes: The Silent Social Revolution (O.U.P.).

G. U. Bhatt: The Educational System of Germany.

14. *Osmania University* The Osmania University provides for M.Ed. examination (partly by papers and partly by thesis). A dissertation is obligatory in addition to four papers. Its ordinances and regulations for the M.Ed. examination are given below :—

1. The degree of Master of Education shall be conferred on a graduate of Arts or Science of the Osmania University or of any other University recognised by it, who has passed the examination for Dip.Ed., B.T., or B.Ed. of the Osmania University or any other University recognised by it in the first or second division and who has pursued "a regular course of study" in the University for not less than one academic year since taking his Dip.Ed., B.T., or B.Ed., and has fulfilled the condition laid down for the residence of students and has passed the prescribed examinations.

2. A "regular course of study" means attendance at not less than 75 per cent of the lectures constituting the course of study in a particular subject:

Provided that in special cases and for sufficient cause shown, the Vice-Chancellor may, on the recommendation of the Dean, condone the deficiency in attendance not exceeding 5 per cent especially for ill-health when the application submitted at the time is supported by an authorised Medical Officer approved by the Dean.

3. A candidate who has failed to pass an examination may be allowed to reappear for the examination without keeping further terms.

4. The course shall include also the following additional subjects, but no examination will be held therein :—

(*a*) Drawing and Blackboard Illustration.

(*b*) Manual Training or Nature Study and Gardening.

(*c*) Physical Training.

5. The distribution of marks shall be as indicated in the scheme of examination and the scope as indicated in the syllabus.

6. The Scheme of Examination is as follows :—

Four papers—100 marks each.

Practical and Record work in each subject—25 marks each, i.e. Total for Practical and Record work—100 marks.

Time allowed for each paper—3 hours.

Pass Marks :

Minimum pass marks in each paper—36%.

Minimum pass marks in the aggregate—40%.

Divisions :

First division : 65% and above of the aggregate marks.

Second division : Below 65% but not less than 50% of the aggregate marks.

Third division : Below 50% but not less than 40% of the aggregate marks.

7. The examination shall comprise four papers :—

Paper I.—General Theory of Education and Educational Sociology.

Paper II.—History of Educational Ideas.

Paper III.—Methodology of one of the following subjects :

English, History and Civics, Mathematics, Geography, Science, Urdu or other Languages.

Paper IV.—Special subject : One of the following :

(i) Educational Organisation and Administration.
(ii) Tests and Measurement in Education.
(iii) Educational Hygiene.
(iv) Advanced Educational Psychology.
(v) Comparative Education.
(vi) Methods and Organisation in Nursery Schools, Kindergartens and Montessori Schools.

8. The following syllabus is prescribed :—

Paper I.—*General Theory of Education and Educational Sociology*

(i) General Theory of Education :

Function of education in biological record. Aims and conceptions of education.

Factors of education and function of school. Problem of curriculum. Formal discipline and transfer of training. Logical and psychological order of studies.

Training of Thought. Analysis of complete act of thought. Various factors and obstacles. Methods of thought. Discovery, Verification and Proof.

Functions of definitions and language in Education.

BOOKS RECOMMENDED

Adams: Evolution of Educational Theory.

Adamson: The Individual and the Environment.

Dewey: How We think.

Dewey: Democracy and Education.

Graham Wallas: The Art of Thought.

Henderson: A Text book in the Principles of Education.

Klapper: Contemporary Education.

Leighton: Individuality and Education.

Moore: Ethics and Education.

Rugg and Schumaker: Curriculum Making.

Thomson: A Modern Philosophy of Education.

Welton: Logical Basis of Education.

(ii) Educational Sociology:

Sociological basis of Education. Meaning and scope of Educational Sociology. Basis and nature of Society. Factors of Socialization. Education as socializing factor. Social progress and problem of Education. Education and Individuality. Education and State. Education and Population. Education and Industry. Education and School organisation. Adult Education. Extra-curricular activities. Discipline and self-government in schools. Co-operation between school and the other social agencies.

BOOKS RECOMMENDED

Bogardas: Introduction to Sociology.

Clow: Principles of Sociology with Educational Applications.

Peters: Foundations of Educational Sociology.

Reader: The Fundamentals of Public School Administration.

Sneden: Educational Applications of Sociology.

Paper II.—*History of Educational Ideas*:

(i) Western:

Greek and Roman Education. Monasticism. Chivalry. Scholasticism, Humanistic education.

The Realistic Education: Montaigue. Bacon. Milton, Commenius and Frank.

Education as Discipline. Locke.

Naturalistic Tendency in Education: Rousseau. Basedow. Psychological Tendency. Pestallozzian movement. Hertbart's contribution. Froebelian movement. Kindergarten.

Montessori: Fusion of Psychological and scientific tendencies.

Herbert Spencer and Scientific Tendency. Sociological Tendency.

Adaptation of Education to Political and Economic needs.

Fusion of Psychological, Scientific and Sociological tendencies.

(ii) Eastern:

Ancient Indian and Vedic Education. Buddhistic education, growth and decay of mass education.

Muslim Education under influence of Hindu learning. Pre-Mughal Muslim and Mughal Education.

Western Influences under the British. Missionary efforts. Oriental Learning.

Raja Ram Mohan Roy, Macaulay and others.

Primary and Mass Education.

Recent Developments in Revivals and Experiments.

History of Physical Education.

History of Vocational Education.

BOOKS RECOMMENDED

Altekar: Education in Ancient India.

Cloyd: Modern Education in Europe and the Orient.

Cubberley: History of Education.

Davidson: History of Education.

Graves: History of Education—Ancient, Medieval and Modern Times.

Jaffer: Education in Muslim India.

Keay: Education in Ancient and Medieval India.

Misawa: The Great Educators and their Ideals.

Monroe: Articles in the Cyclopaedia of Education.

Monroe: A Text-Book in the History of Education.

Nurullah and Naik: Education in India.

Rusk: Doctrines of the Great Educators.

Paper III.—*Methodology of one of the following subjects*:

English, History and Civics, Mathematics, Geography, Science, Urdu or other Languages.

(i) *Teaching of English*:

Theory of language teaching. Principles of Linguistic Pedagogy. Problems of Bilingualism.

Phonetics. Value of Phonetics—its importance to Teachers in English. Comparative study of Indian and English sounds and their production. Instrumental Phonetics. Reading of Prose and Poetry.

Teaching of English Reading in Indian Schools. Psychology of Reading. Reading Aloud. Silent Reading. Preventives and remedy of individual deficiencies in Reading.

English Grammar, idioms with composition.

Examinations in English.

Educational aids in connection with the teaching of English.

BOOKS RECOMMENDED

Blaisdell: Ways to Teach English.

Ballard: The Teaching of the Mother Tongue.

Craigie: The Pronunciation of English.

Jesperson: How to teach a Foreign Language.

Jones: An English Pronouncing Dictionary.

Jones: The Pronunciation of English.

Kitsen: Language Teaching.

Lamborn: The Rudiments of Criticism.

Lang: A History of English Literature.

Myres: Basic and the Teaching of English in India.

Palmer: A Scientific Study and Teaching of Language.

Philsbury: The Psychology of Language.

Saintsbury: Prosody.

Stone: Silent and Oral Reading.

Tomkinson: The Teaching of English.

West: Bilingualism.

Wyatt: The Teaching of English in India.

(ii) *Teaching of History and Civics*:

History.

Process involved in the learning of History.

Imagination, memory and judgment: their cultivation.

Sources and their examination.

Measurement of attainment in History, tests and testing.

Types of errors in History and their suggested remedies.

Standards for the improvement of teachers.

Dalton plan and laboratory methods in History.

Civics.

Relation between History and Civics.

Historical and Civic sense—how to develop.

Aims and objectives.

Types and courses in Civics.

Methods and special problems.

Equipment and materials.

Tests in civics and methods of conducting them.

BOOKS RECOMMENDED

Bourne : Teaching of History and Civics.

Burton : The Supervision of Elementary Subjects.

Clarke : Foundations of History Teaching.

Freeman : Psychology of the Common Branches.

Judd : Psychology of High School Subjects.

Klapper : Teaching of History.

Reed : Psychology of Elementary School Subjects.

Schmidt : Teaching and Learning the Common Branches.

Starch : Educational Psychology.

(iii) *Teaching of Mathematics* :

Principles of Mathematical Education.

Educational value of different mathematical subjects of High School course.

Experiments in teaching of Mathematics.

Treatment of special topics of different branches of Mathematics.

Drill in Mathematics.

Mathematics in relation to other school subjects.

Future of Mathematics teaching.

BOOKS RECOMMENDED

Branford : A Study of Mathematical Education.

Garson : Mathematical Education.

Nunn : The Teaching of Algebra.

Smith : The Teaching of Elementary Mathematics.

Thorndike : The Psychology of Arithmetic.

Thorndike : The Psychology of Algebra.

The Report on the Teaching of Geometry (Mathematical Association, London).

(iv) *Teaching of Geography* :

Geography as a Human Science.

Regional study of Geography.

Methods and special problems.

Correlation.

Geographical Laboratory and Library and their Equipment.

Collateral Reading.

Outdoor work in Geography.

Practical Geography.

Examinations and Tests.

BOOKS RECOMMENDED

Barnard: The Principles and Practice of Geography Teaching.

Fairgrieve: Geography in School.

Fairgrieve and Young: Practical Geography.

Garmelt: The Study of Map.

Hatch: Outdoor Geography.

Holtz: Principles and Methods of teaching Geography.

Skeat: The Principles of Geography.

Semple: Influence of Geographical Environment.

Steers: Maps and Map-Making.

Wallis: The Teaching of Geography.

(v) *Teaching of Science*:

Aims of Science Teaching.

Methods in Science Teaching.

Everyday Science.

Laboratory and its Management.

General *vs.* Specialised Science.

Science and Industry.

Correlation of Science with other school subjects.

Humanism in Science.

BOOKS RECOMMENDED

Cawthorne: Science in Education.

Parsons: Everyday Science.

Smith and Hall: Teaching of Physics and Chemistry.

Westaway: Science Teaching.

Board of Education Report: Natural Science in Education.

Paper IV.—(i) *Educational Organisation and Administration*:

Nineteenth century and movement for National Education. National system and expression of national genius. Influence of historical, geographical, ethonological, political and economic factors on systems of education in England, U.S.A., Germany, Italy, Russia, France and Japan. Aims of national system of education. Indian Education from national point of view.

Free and compulsory education at different stages. Private and State education.

Educational Control and Management. Educational authorities—Central, Provincial and Local. The organisation and functions of managing bodies.

Work of Inspector: Supervision and Inspiration. Co-operation with school authorities, management and staff. Methods of evaluation of work of school as a whole and of individual teachers. Encouragement of experiments. Co-ordination and sharing of experience.

Educational Finance and its administration: Sources of income—State and private—Central, provincial and local. Endowments and Grants-in-aid. Free places and Scholarships.

Educational services: Central organisation. Research Statistics. Museums. Libraries. Bureaus. Publications. Exhibitions. Broadcasting. Film and Lantern libraries.

The Teacher: Selection and Training. Salaries, pensions and terms of service. Professional Organisations—National and International. Professional etiquette. Examinations, internal and external.

Trends in Post-War National Education abroad and current tendencies in India.

BOOKS RECOMMENDED

Adams: Modern Developments in Educational Practice.

Bray: School Organisation (Urdu Trans. by Tahir).

Bates: The Kindergarten Guide.

Darwin: The English Public Schools.

Dewey: The Dalton Laboratory Plan.

Gillingham: The Indian Kindergarten.

Harris: Changing Conceptions of School Discipline.

Hearnshaw: Educational Advancement Abroad.

Holroyd: The Organisation of School Societies and Other Activities.

Lynch: The Rise and Progress of the Dalton Plan.

Mackee: Instruction in Indian Secondary Schools.

Maclowen: Extra-Curricular Activities.

Montessori: Montessori Method.

Montessori: Handbook for Parents and Teachers.

Newton: Universities of the Empire.

Pekine: Co-education.

Rayan and Watson: Examination Tangle and the Way Out.

Ryburn: The Progressive School.

Sandiford: Comparative Education.

West: Indian School Management and Inspection.

Wren: Indian School Organisation.

Ziauddin Ahmed: Systems of Education.

(ii) *Tests and Measurement in Education*:

Detailed syllabus will be prescribed as and when required.

(iii) *Educational Hygiene*:

Detailed syllabus will be prescribed as and when required.

PRACTICAL AND RECORD WORK

Practical or Record work in each subject of the examination shall be carried out by students during the year under the direction of Members of the Staff concerned.

(iv) *Advanced Educational Psychology*:

Nature and scope of educational psychology. Schools of Psychology. Biological background of Education. Mental hereditary and Individual differences.

Behaviour: Instincts and Habits. Emotions. Development of sentiments.

Acquisition of knowledge and skill. Learning process and laws of learning. Remembering and Forgetting.

Muscular and mental work. Fatigue. Intelligence and its development. Right habits of thinking.

Psychology of Character. Training. Shaping of basic impulses of Curiosity, Escape, Pugnacity, Appeal, Parental protection, Herd, Sex, Laughter, Play, etc., for purposes of character building. Problems of freedom. Authority and Discipline. Psycho-analysis and its educational applications.

Mental and Educational Measurements. Inaccuracies in examinations. Unreliability of estimates of intelligence and character and traits:

PRACTICAL COURSE

Practical Laboratory experiments, Mental Testing and Educational measurements.

Simple experiments on psychological tests.

Tests on Intelligence, Achievement, Aptitude, Emotion. Personality, Reading and Spelling, etc.

BOOKS RECOMMENDED

Holzinger: Statistical Methods in Education.

McDougal: An Outline of Psychology.

Meyers: Text-book of Experimental Psychology.

Sandiford: Educational Psychology.

Spearman: The Abilities of Man.

Titchener: Experimental Psychology.

Valentine: Experimental Psychology and Education.

Whipple: Manual of Physical and Mental Test.

Woodworth: Experimental Psychology.

Board of Education: Psychological Tests of Educable Capacity.

(v) *Comparative Education*:

A general survey of the organisation of national systems of education and of one of the following topics, viz.:—

(*a*) Elementary education.

(*b*) Secondary education.

(*c*) Technical education in Secondary schools.

(*d*) Adult education—with special reference to Great Britain, France, Germany, Russia, U.S.A. and Japan.

(vi) *Methods and Organisation in Nursery Schools, Kindergartens and Montessori Schools*:

Principles of child study with special reference to infant years.

Psychology of the pre-school child.

Curriculum for infant schools.

Organisation and equipment.

Short history of the Infant School Movement from Pestalozzi to Montessori. The Nursery School movement.

Selected writings of Pestalozzi, Froebel and Montessori.

15. *Patna University* The Patna University provides for a M.Ed. course in which an original investigation is obligatory, although the marks assigned to it are comparatively fewer. The details of the course will be understood from the following extract out of a prospectus issued by the Patna Training College:—

The course of study is a continuation of the course for the Diploma in Education and shall extend over one academical year and comprise the following subjects:—(i) Philosophy of Education, (ii) Educational Psychology, (iii) Methods of Teaching a Special Subject, (iv) History of Education, (v) Intensive Study of Special Educational Problem, (vi) Educational Measurements, and (vii) (*a*) and (*b*) Practical Work.

In the theoretical portion of the examination there shall be six papers of four hours' duration, each carrying 100 marks; namely one paper in each of the subjects (i) to (vi) subject to the proviso mentioned under Paper III, paragraph 2.

The course of practical work shall be of a specialised nature and the examination in teaching shall be held at a recognized school in Patna and at such other places as the Syndicate may determine. Each candidate shall prepare a scheme of work extending over one year in the special subject studied by him and shall be required to give one or more of the lessons included therein. He shall also be required to submit a report on an educational investigation carried out by him during his year of study—100 marks shall be allotted for the lesson or lessons and scheme of work, and 100 marks for the report.

Paper I.—Philosophy of Education.

Definition and Province of Philosophy—its value for and relation to practical life and education. Theories of Education. Relation of Education to Biology, Sociology, Psychology and Ethics. Aims of Modern Education. The State and Education. The General Problems underlying the Educative Process. The Newer Tendencies in Education.

BOOKS RECOMMENDED

Sir John Adams: The Evolution of Educational Theory.

Sir Percy Nunn: Education; its Data and First Principles.

John Dewey: Democracy and Education.

Herbert Spencer: Education.

Robert R. Rusk: The Philosophical Bases of Education.

C. Johnson: Educational Biology.

John Dewey: Education Today.

Paper II.—Educational Psychology.

Definition and Province of Psychology. The Various Schools of Psychology. Its Relation to Education. Its Methods. Relation of Mind and Body. The Nervous System. Mental Activity in general. Primary Mental Functions. Development of Mental Life. Abnormal Psychology. The Unconscious. The Learning Process, its application to special subjects. Individual Differences. Psychology of Early Childhood. Psychology of Adolescence. Collective Psychology and its Application to School Problems.

BOOKS RECOMMENDED

Peter Sandiford: Educational Psychology.

Olive A. Wheeler: Youth.

Kirkpatrick: The Fundamentals of Child Study (1930 edition).

F. Watt: Abnormal Psychology.

W. McDougall: Introduction to Social Psychology.

Hingley: Studies in Psycho-analysis.

Paper III.—Method of Teaching a Special Subject.

No text-books are prescribed; the candidate must have made a special and advanced study of the subject and must be thoroughly acquainted with the school syllabus in it in different types of schools. A very high standard is required as the student is expected to be a specialist in the subject.

In place of written examination in this paper a candidate may offer a thesis, provided he has taken Honours in his special subject at the B.A. or B.Sc. examination or taken the M.A. degree in that subject. The subject of the thesis excludes such educational investigation as he must carry out in connection with his practical work in (vii) (*a*).

Paper IV.—History of Education.

A study of Greek educational theory and practice; a broad survey of Roman education, medieval education, humanistic education, education after the Reformation; education of the courtier; the seventeenth, eighteenth and nineteenth century educators in Europe, and general knowledge of ancient and medieval educational systems in India; recent developments in education in India and abroad.

A broad comparative view of the system of national education in certain advanced countries to be specified from year to year so far as it is helpful to the study of Indian educational problems. For the year 1949-50 the special educational systems to be studied shall be those of Russia, Canada and Denmark.

BOOKS RECOMMENDED

W. Boyd: The History of Western Education.

Mckee: Developing a Project Curriculum for Village Schools in India.

N. N. Law: Promotion of Learning in Muslim India.

Altekar: Education in Ancient India.

P. Sandiford: Comparative Education.

I. L. Kandel: Comparative Education.

Year-books of Education (Evans Brothers).

Paper V.—Intensive Study of a Special Educational Problem.

The special problem to be studied for 1949-50: *Educational Recognisation with special reference to Bihar.*

BOOKS RECOMMENDED

1. The K. T. Shah Committee Reports, Vols. I, II and III for Primary, Secondary and University education.
2. The Abbott and Wood Committee Report on Vocational Education.
3. The Hadow Committee Reports for Primary and Adolescent stages of instruction.
4. The Spence Committee Report.
5. Educational Reconstruction (Talimi Sangh).
6. C. A. B. Report (Sargent Committee).
7. The Travancore Reorganisation Committee Reports, 1948.
8. Quinquennial Reports of the Governments of Bihar and India.
9. The Educational Year-book, 1948.

Paper VI.—Educational Measurements.

History of Educational Measurement; Standardised Objective Tests. Types of Tests and Scales. Nature and Process of Measurement. Construction of Tests. Quality Scales. Norms and Derived Scores. Limitations of Educational Measurements.

The existing examination systems and their improvement. The school survey. Application of the test to school work.

Nature of intelligence and intelligence tests. Individual and group tests. Revision of Binet tests with special reference to the Hindustani revision.

Educational statistics and their sources. Frequency distributions. Measurements of the central tendency. Measures of variability. Graphic methods and the Normal curve. Elementary principles of chance. Reliability measures. Comparison of groups. Elements of the theory of correlation.

BOOKS RECOMMENDED

Monroe : The Theory of Educational Measurements.

Board of Education : Psychological Tests of Educable Capacity.

C. H. Rice : Hindustani Binet Performance Point Scale, Parts I, II and III.

H. E. Garrett : Statistics in Psychology and Education.

Terman and Merrill : Measuring Intelligence.

Burt : Mental and Scholastic Tests.

Leavine and Marks : Testing Intelligence and Achievement.

Paper VII.

(*a*) Investigation, and (*b*) Teaching.

16. *Poona University*: The Poona University provides for the M.Ed. degree by thesis as well as for the M.Ed. degree (by papers and dissertation). Its regulations on the subject are the same as those of the old Bombay course and have already been given above under Baroda University.

17. *Saugor University*: The Saugor University provides for the M.Ed. (partly by papers and partly by research). Its regulations on the subject are given below:—

1. (*a*) Any graduate in Arts or Science of a recognised University who has been admitted to the Degree of Bachelor of Teaching in the University of Saugor or to a Degree recognised by the University of Saugor as equivalent thereto for the purpose of this Ordinance may, subject to the provisions of this Ordinance, offer himself or herself as an internal candidate for the Degree of Master of Education:

Provided that he shall have passed the examination for the Degree of B.T. in the first or second division both in theory and in practice.

(*b*) In exceptional cases, a person not eligible under clause (*a*) of this paragraph may, on the recommendation of the Faculty of Education, be permitted by the Academic Council to offer himself or herself as a candidate for the Degree. Provided that,

(i) he or she has passed in the I or II division the examination for the M.A. or M.Sc. Degree of the University or for the Degree of another University recognised by the University as equivalent thereto for the purpose of this Ordinance, and has been admitted to the Degree; and

(ii) he or she holds a Diploma or a Certificate in teaching, which in the opinion of the Faculty of Education, is of a sufficiently high standard.

2. The examination for the Degree shall be held annually at Jubbulpore in the last week of April or on such other date as may be appointed by the Academic Council in this behalf, the said date being notified in the Central Provinces and Berar Gazette not less than six months before the commencement of the Examination.

3. A student for the M.Ed. Degree shall prosecute a regular course of study in a College admitted to the privileges, on this behalf, of the University for a period of not less than one Academic session:

Explanation.—Regular Course of study means attendance at 75% of the lectures delivered in the subjects of the examination and completion of the prescribed course of laboratory practical upto a date four weeks preceding the date of the commencement of the written examination. The certificate of the Principals relating to the completion of the

required attendance of the applicants at their respective colleges shall reach the Registrar not later than three weeks preceding the date of the commencement of the written examination.

4. The examination shall consist of two parts. Part I shall be in two sections, a candidate for the Degree shall offer one section only. Part II shall be common to both sections. The Examination in both parts shall be taken simultaneously.

Part I.—A Written Examination in:

Section A. (*M.Ed. Teaching*):

(1) Psychology of Education and Educational Sociology.

(2) Methodology of Teaching.

(3) Development of Education in Modern India.

(4) Educational and Social Measurements.

Section B. (*M.Ed. Administrative*):

(1) Psychology of Education and Educational Sociology.

(2) Principles of Education.

(3) Educational Organisation and Administration in India, U.K., and U.S.A.

(4) Inspection and Administration of Schools.

Part II:

(i) Prescribed Course of Laboratory Practical.

(ii) Candidate shall write a dissertation bearing on any aspect of their study embodying either

(*a*) the results of their original research or

(*b*) a critical presentation of existing data.

5. (*a*) One paper of 3 hours' duration shall be set in each of the subjects for Part I of the examination, the marks allotted for each paper being 100. (Maximum Marks 400.)

The scope of the subjects for Part I of the examination shall be indicated in the prospectus of examinations.

(*b*) The dissertation shall carry 100 marks.

(*c*) Practical Note Book, and *Viva voce* on the practical work performed during the session and on the dissertation will carry 100 marks.

6. In order to be successful at the examination, a candidate shall pass in both parts simultaneously by obtaining not less than 40 per cent of the aggregate marks obtainable in Part II. Examinees obtaining not less than 60 per cent of the aggregate marks obtainable for Parts I and II combined shall be awarded distinction.

7. Fee for admission to the examination shall be Rs. 60.

SYLLABUS OF COURSES FOR M.Ed. IN ADMINISTRATION

PAPER I

Psychology of Education and Educational Sociology.

1. Scope of Psychology of Education.
2. Facts and Theories of Mental Development: Intellectual, Emotional, Social, Language and Movement.
3. Facts and Theories of Learning. Learning predominantly social and predominantly individual. Incentives to learning. Guidance in learning.
4. (*a*) Philosophy of Measurement in Education.
   (*b*) Educational, Vocational and Child Guidance. Occupational placement. Organizational and Methodological Problems.
5. An outline knowledge of Sociology: General Problems of Social Organisation and Social change. Geographical, Biological and Social determinants of culture.
6. Social functions and agencies of urban and rural education. School curriculum and social change. Social and Industrial relations and education. Adult Education—Psychology and Methods.

BOOKS RECOMMENDED FOR PAPER I

Woodworth: Psychology: A study of mental life. (For introductory reading.)

Rusk: Experimental Education (For introductory study).

Charlotte Buhler: Frôm Birth to Maturity (Introductory reading).

Huggett, Millard: Growth and Learning in the Elementary School.

Thorpe: Child Psychology and Development.

Kingsley: Nature and Conditions of Learning.

Ross: Measurement in To-day's Schools.

Susan Isaacs and others: Educational Guidance of the School Child.

Mawry Burbury: Child Guidance.

Erickson and Smith: Organisation and Administration of Guidance Services.

Hollingworth: Abnormal Children.

Annay Reed: Occupational Placement.

Cook: Community Backgrounds of Education.

Bear: Social Functions of Education.

Wofford: Modern Education in the Small Rural School.

Symonds: Mental Hygiene of the School Child.

Scope of Laboratory Practical (Part II).

1. Experiments on Psychology of Learning.
2. (*a*) Techniques of Measurement in Education.

(b) Psychological and Educational (including instructional) testing procedures. School Progress Record. School Exams.

3. Construction and administration of sociometric scales.
4. Practical exercises on statistical methods applied to Education.

BOOKS RECOMMENDED

(A list of Prescribed Experiments is obtainable from the Psy. Lab.)

Freeman: Mental Tests.

Cattell: Guide to Mental Testing.

Hull: Aptitude Testing.

Lundberg: Social Research.

Garrette: Statistics in Psychology and Education.

Lindquist: Statistical Analysis in Education.

PAPER II

PRINCIPLES OF EDUCATION

1. Education—Its meaning and necessity; formal and informal education; importance of family education; educational implications of "Growing up" in the community.
2. School—Its relation to individual, society and state; different types of schools and their functions. Changing conceptions of Role of the School as an Educational Organisation.
3. Philosophy of Education—Naturalism, Pragmatism, Idealism, Realism.

   Bases of Education—Biological, Psychological, Ethical, Theological and Sociological Basis.
4. Aims and Ideals of Education—Ancient, medieval and modern aims and ideals of education; democratic, Totalitarian and international ideals.

   Principles of curriculum construction; recent developments in curriculum making.
6. Discipline—Ancient and modern conceptions; various theories of punishment; its relation to development of pupils' character and school organisation and administration.
7. Doctrine of Formal Discipline.
8. (a) Basic National Education;

   (b) Religious education and the problem of religious instruction in India;

   (c) Rural Education.
9. Philosophy of Physical Education. Health Education. Their Social Implications.
10. Modern Trends in Vocational Education.

BOOKS RECOMMENDED FOR PAPER II

T. P. Nunn: Education, Its Data and First Principles.

J. Adams: Evolution of Educational Theory.

M. Brubacher: Modern Philosophies of Education.

Rusk: Philosophic Bases of Education.

Kilpatrick: Source Book of Philosophy of Education.

Bode: Modern Educational Theories.

B. Russell: Education and the Social Order.

J. Dewey: Democracy and Education.

Davis: The Matter and Method of Modern Teaching.

Thomas and Lang: Principles of Modern Education.

Dr. Whitehead: Aims of Education and other Essays.

J. Maritain: Education at the Cross-roads.

PAPER III

Educational Administration and Organisation in India, U.K. and U.S.A.

1. The State and Education: Control in respect of Elementary, Secondary and Collegiate Education by various Government and other authorities—role of local bodies in the system of public and private education.

2. Financing of Education by various Government bodies—grants-in-aid—other arrangements of financing.

3. Universities, other institutions of higher education and the national system of Education—autonomy of the Universities—State control and finance.

4. Organisation of pre-primary, elementary, secondary and collegiate systems of education—provision for technical education. Professional training of teachers—compulsory education—adult education—correspondence education.

5. Relationship with other Agencies: Employment Service; Health Service; Service adapted to Rural Education and Welfare.

BOOKS RECOMMENDED FOR PAPER III

1. The following reports of the Government of India, on Education:

   (a) The Progress of Education (Quinquennial Reports—1927-32 and 1932-1937).

   (b) Post-War Educational Development (Central Advisory Board's Report).

2. The following reports on Education and Acts of the Governments of C.P. and Berar:

(i) Annual Reports for the last ten years.

(ii) Reorganisation of Secondary Education (Jha Committee Report), 1947.

(iii) Secondary Education Act of 1948.

(iv) Primary Education Act of 1922.

3. *Dent*: Education Act of 1944.
4. *Kandel*: Studies in Comparative Education.
5. *Russell and Judd*: The American Educational Systems.
6. Spens and Hadow Reports.
7. The Education Act of 1944.
8. *C. Norwood*: The English Educational System.
9. *Sandiford*: Comparative Education.
10. *Brereton*: Studies in Foreign Education.
11. *Cubberley, Ellwood Patterson*: Public Education in the United States—a study and interpretation of American Educational History (Boston, Houghton, Mifflin, 1934).
12. Literature on Professional Training of Teachers in the United Kingdom, in U.S.A. and in some of the Commonwealth countries.

PAPER IV

Inspection and Administration of Schools

INSPECTION:

1. Objectives of Inspection and methods of achieving them.
2. School buildings and grounds, equipment, laboratory, etc.
3. (*a*) Inspection of instructional methods and matter.

   (*b*) Appraisal of School Community, Activity Programmes.
4. Class-room Inspection.
5. Inspection of School Office, registers and accounts.
6. Systems of inspection in U.K. and U.S.A.
7. Reporting of Inspection. School Surveys.

ADMINISTRATION:

1. Principles of Administration of the School. Aids to Administration: Maximum use of the space available. School Personnel—School Systems of work.
2. School Office—Organisation, budgetting and accounting. Standing Orders and Educational Manual.
3. Duties of the Headmaster and School Staff.
4. Administration and guidance of pupil personnel—Discipline, Physical and health education programme, student organisations and extra-curricular activities.

5. Teacher activities, training of teachers in service.
6. The school and the public—problems arising out of the relationship. Parent-Teacher Associations. The relation of the School to other educational agencies.
7. Equipment, examinations, time-tables, progress record, attendance, fee and other registers.
8. Sites and plans for school buildings.

BOOKS RECOMMENDED FOR PAPER IV

Maxwell C. R. and L. R. Kilzer: High School Administration, Doubleday Doran & Co., 1936, N.Y.

Thomas H. Briggs: Secondary Education, Macmillan Co., N.Y., 1933.

Douglass H. R.: Organisation and Administration of Secondary Schools, Boston, Genn and Company.

Mochlman, Arthus B.: School Administration, Boston, Houghton, Mifflin Co., 1946.

Leonard V. Koos: Administering the Secondary School, American Book Company, N.Y., 1940.

Mort Paul B.: Principles of School Administration, McGraw-Hill Company Inc., 1946.

Cox. Phillip W. L. and R. Emerson Langfitt: High School Administration and Supervision, American Book Company, N.Y., 1934.

Barr A. S. William H. Burton and Leo J. Brueckner: Supervision, D. Appleton-Century Company, N.Y., 1938.

Briggs Thomas H.: Improving Instruction, the Macmillan Co., 1938, N.Y.

18. *General Points for Discussion*: A review of the ordinances and regulations of sixteen universities on the subject of the M.Ed. examination (given in the foregoing pages) raises several questions of policy. It is not suggested for a moment that all M.Ed. courses should be alike; but it is equally evident that certain broad principles of policy might be advantageously adopted everywhere. What these principles should be, it is for the Conference to decide. But for convenience of discussion, I put down below the several points that arise from a comparative study of the existing syllabuses.

(1). *Admission*: (*a*) Can a student proceed to M.Ed. immediately after completing his B.T.?

or

Should he be required to get teaching experience for a prescribed period after passing the B.T. examination and before admission to the M.Ed. course ?

If so, what should the prescribed period be ?

(b) Should admission to the M.Ed. course be open to any student who passes the B.T. or should it be restricted to those who get a second or first class in the B.T. ?

(2) *Duration* : Should the duration of the course be one year or two ?

(3) *Types of courses* : M.Ed. can now be taken in three ways—

(a) entirely by thesis ;

(b) partly by thesis and partly by papers ; and

(c) entirely by papers.

What are the merits and demerits of each of these types of courses and what modifications can be suggested in the existing courses in the light of the findings on the above issue ?

(4) *Aims of the M.Ed. Course* : What should be the aims of the M.Ed. course ? It is suggested, for instance, that the M.Ed. course should aim at—

(a) training in research technique ;

(b) creating personnel for the staff of training colleges, higher posts in education departments, etc.;

(c) popularising a study of educational problems ; or

(d) creating experts for specialised branches of education such as vocational guidance.

What changes in the M.Ed. course are necessary in view of these and such other aims of the M.Ed. course as may be agreed upon ?

(5) *Dissertation* : (a) Should a dissertation be made obligatory on all M.Ed. students ; or should it be permitted to those students only who have obtained a second or first class at the B.T. examination ?

(*b*) What percentage of the total marks be assigned for the dissertation ?

(*c*) What general principles regarding the standard to be expected in a dissertation can be laid down ?

(6) *Co-ordination of the M.Ed. courses* : A large variety of courses is essential at the M.Ed. stage in order to train all the different kinds of personnel required for educational activities. Financially it would be impossible to provide all such courses in every university. On what principles, therefore, should an attempt be made to co-ordinate the M.Ed. courses at the different universities so that the best results can be obtained in return for a minimum expenditure ?

(7) *Typical M.Ed. courses* : It would be extremely desirable if the Conference can suggest *all* the different courses that need to be provided at the M.Ed. level. It would then be left to the different universities to adopt such of them as they may choose (with modifications, whenever necessary).

(8) *Teaching* : Should teaching form a part of the M.Ed. course at all ? or would it be better to finish it at the B.T. stage only ?

(9) *Procedure for discussion* : On the first day, the delegates may speak broadly on the issues raised above. The committee will then thrash out every point and submit a detailed report to the General Session on the third day.

MADHURI R. SHAH

Organising Secretary

ITEM No. 4(5) OF THE AGENDA

The Indian Journal of Educational Research

One of the items to be discussed by the Conference of Training Colleges is the planning, promotion, co-ordination and publication of educational research in India. The *Indian Journal of Educational Research* has been started primarily with the object of publicising the findings of educational research carried out in India. It was, therefore, felt that the Editorial Board of the Journal would be greatly benefited if the major questions regarding editorial policy were discussed by the Conference. The following questions regarding the Journal are, therefore, placed before the Conference for discussion and decision. The Indian Institute of Education would like to assure the delegates that their recommendations would receive the most earnest consideration and would be carried out as far as possible.

2. *The objectives of the Journal*: The objectives of the Journal are stated as follows :—

(*a*) To publish brief synopses of all theses and dissertations on educational topics accepted by Indian Universities;

(*b*) To publish annual lists of topics on which investigations are being carried on in University Departments of Education or Training Colleges;

(*c*) To publish periodically comprehensive indices of all educational research published elsewhere;

(*d*) To review books on educational research; and

(*e*) To publish articles on the appraisal, planning, promotion, co-ordination and publication of educational research in India.

In other words, the Journal would like to publish *all* the educational research carried out in India; if that were not possible, it would at least index all research published elsewhere. Does the Conference approve of these objectives ?

One point that has been raised in the discussions so far is this: Some persons believe that we should publish only those theses and dissertations which are *good* and that no attempt be made to publish *every* thesis or dissertation. It is argued in support of this view that some of the dissertations or theses do not deserve to be published. We, however, believe that our standards would not be raised unless *every* accepted thesis and dissertation is published. The *space to be given* to a thesis or dissertation would depend upon its merit; but every thesis and dissertation that is approved for a university degree must be reported. It is only under this policy that, we believe, can good and comparable standards be maintained at all research centres.

What advice would the Conference offer on this issue ?

3. *Editorial Board*: The Journal has to be looked upon as the co-operative effort of all Training Colleges and Universities in India. The research done at any one centre is so meagre that it would be next to impossible to conduct a Journal; but as a co-operative enterprise of all Universities, it is possible to run a good quarterly journal. It is on this basis that the present Journal is planned.

The Editorial Board consists of the Chairman and the Managing Editor—both appointed by the Indian Institute of Education—and one Professor from every Indian University that has a faculty in education. This gives an all-India character to the Board. It has been variously described as 'imposing', 'strong' and 'magnificent'. One review observes that it can meet only in spirit. But we feel that our present policy is really good. There are very few common questions that must go before the Board. These can always be decided by circulation of papers. Even a regular meeting can be held at the time of conferences like this or the All-India Educational Conference. Every member of the Board is primarily responsible for the publication of the research done at his centre; and this he can very conveniently attend to. Our policy, therefore, secures all-India co-operation and involves no inconvenience.

What advice would the Conference offer on this issue ?

4. *Format*: There were several adverse comments on the old format of the Journal. We have, therefore, changed it completely from the third issue. We, believe, that this would now be found to be satisfactory.

Has the Conference any suggestion to offer ?

5. *Adequacy* Even with this increase in size, we feel that the Journal would not be adequate to cope with the publication of *all* research. This is how we calculate the position : —

Past Research

200 dissertations at the average of 10 pp. each	2,000 pages
50 theses at the average of 20 pp. each	1,000 pages
Total	3,000 pages

Current Research

10 theses a year at 25 pages each	250 pages
60 dissertations at 10 pages each	600 pages
Total	850 pages

In other words, we require 3,000 pages to print all the past research and about 850 pages to keep up with the present research.

If it is argued that the pages allowed in the above calculations are far too many, it may be pointed out that theses and dissertations are only a part of the total research done. University professors, institutions, etc. do additional research which also needs publication. Moreover, articles and discussions on the subject are not included in the above calculations. On the whole, therefore, it may be said that the above estimate is conservative rather than extravagant.

The present Journal which gives about 120 pp. a quarter can hardly do the task. It will ultimately have to become a monthly of 80 pp. and about 5 or 6 special volumes of about

500 pp. each would have to be brought out for the publication of past research.

The Institute can do this—

(*a*) If Governments, universities, and other organisations give a subsidy of Rs. 2,500 per volume of 500 pages of the Journal size ;

(*b*) If we can have about 800 to 1,000 subscribers for the Journal ; and

(*c*) If Government subsidies are given to the Institute to make the Journal at least a bimonthly or to increase its size to 200 pp. per issue (A subsidy of Rs.. 3,000 per year is needed).

The total financial liability is, therefore, about Rs. 15,000 non-recurring (for past research) and Rs. 3,000 recurring for the current. These are really infinitesimal amounts to the Central Government or to the Provincial Government. But unless they come out with a grant-in-aid, the problem would not be solved easily.

What advice would the Conference offer on this issue ?

6. *Other matters* The Institute, and the Editorial Board would be very grateful to the Conference if it suggests any lines on which the utility and standard of the Journal can be raised.

What definite suggestions would the Conference make ?

MADHURI R. SHAH
Managing Editor

The Asia Publishing House which has now taken over the publication of the Journal wholly agrees with the sentiments expressed above and would strive its utmost to give effect to the recommendations of the Conference.

B. A. OLKAR
for Asia Publishing House.

SUPPLEMENTARY AGENDA No. 2

The President has sanctioned the inclusion of the following items in the agenda :

A. Suggested by Shri F. S. Chothia

13. *The manner in which the training colleges may help the cause of educational and vocational guidance by standardising and popularising the use of psychological tests.*

B. Suggested by Shri K. B. Tergaonkar

14. *Training of Teachers in Basic Education.*
15. *Research in Basic Education.*

C. Suggested by Dr. V. V. Kamat

16. *The time and venue of the next Conference.*
17. *The publication of the proceedings of this Conference.*

D. Suggested by Shri M. T. Vyas

18. *A study of the recent movement in England to establish* INSTITUTES OF EDUCATION, *with special reference to what India may learn from it.*

MADHURI R. SHAH

Organising Secretary.

Important Requests to Principals of Training Colleges and other Invitees

1. *Acceptance of the Invitation* : We have not as yet heard from several Principals and other persons invited whether they are coming to the Conference. May I request every invitee to write to me immediately and strive his utmost to come ?

2. *Data about training colleges* : We immediately need certain data re : every training college in India (functioning at the university level). The details about this will be found on pp. 4-5 of the papers circulated. Will those Principals who have not sent this data already send it to me by return of post ?

3. *Papers* : Those invitees who propose to read papers should immediately intimate to me the subject of their paper and the approximate time they will need. An advance typed copy of the paper may be sent to me by 15th November 1950 at the latest.

4. *Other Persons Accompanying the Invitees* : Some invitees want to know if they can bring some members of their families with them. This is welcome and we shall strive to make lodging and boarding arrangements if sufficient advance intimation is given. No charges will be made for the lodging and boarding arrangements for the delegate himself. But for the other persons accompanying him, actual expenses (which will not exceed Rs. 10 per day per adult member) will be charged.

5. *Agenda* : Delegates and invitees are requested to send their comments on the items included in the agenda to the undersigned as early as possible.

Suggestions for new items in the agenda should also be sent early.

MADHURI R. SHAH

Organising Secretary.

ITEM No. 7 ON THE AGENDA

Observations of the Indian Universities Commission on Educational Courses and Research in Indian Universities

It is essential that this Conference of Training Colleges should consider the observations of the Indian Education Commission on Educational Courses and Research in Indian Universities. These are given below :—

1. *The Training Colleges*: People in this country have been slow to recognise that Education is a profession for which intensive preparation is necessary as it is in any other profession. The first training institutions to be started were all financed and managed by the Government. In Madras the Government Normal School was established in 1856 and its name was changed into that of Teachers' College in January 1886. A Secondary Training College in Bombay was founded in 1906 and prepared secondary teachers for its own diploma, known as " S.T.C.D.", until it was affiliated to the University in 1922 for teaching courses leading to the B.T. degree. The David Hare Training College, Calcutta, was opened in July 1908, in the building which was at one time occupied by the Albert College. It is now housed on a spacious site in the southern part of the city and trains students for the B.T. degree of the University. There are Government Colleges at Patna and Allahabad, the latter giving its own diplomas, while Nagpur, Banaras, Aligarh and Lucknow have University Training Colleges. All these institutions are for the training of graduates who get the diplomas or the degree after training for one academic year.

2. *Courses*: There is not much of variation between the courses prescribed in the different institutions and generally they have compulsory papers on the Principles (or Theory) of Education, Methods of Teaching, History of Education, School Management and Hygiene, provision being also made for practical teaching (Criticism lessons and Demonstration lessons). In addition to the compulsory courses students

generally specialise in the methods of teaching one or more of a number of optional subjects. Students have to pass in the written papers and the practical examination separately. While the training for the written papers follows more or less the same lines in all universities, there is some variation about the practical work. Some universities insist on 60 supervised lessons before the candidates are eligible to appear; others may not insist on more than 10. There are differences again as regards the care taken with the supervision and criticism of the lessons. There are difficulties about the choice of the schools where the practical lessons have to be conducted. The older institutions like the Teachers' College, Madras, or the David Hare Training College or the Secondary Training College, Bombay, have their own practising schools, but the Principal of the last named Institution mentioned that the Elphinstone Technical School (the official demonstration school) was becoming more and more technical every year. So it has been found necessary to farm out a large majority of the students to several City schools. This has resulted in a less efficient training of the student-teachers and a vertical division between lecture and lesson days.

3. *Numbers*: Madras has more than one training college in the city, while there are several others outside. The Government College at Saidapet (The Teachers' College) admits about 140 students to the B.T. class, the Meston Training College has about 70 and the St. Christopher's Training College where all the students are women has about 45 students. The annual intake for B.T. of the Secondary Training College, Bombay, is about 90 and that for the David Hare Training College about 120. During the last 2 or 3 years the necessity of training more teachers has been recognised in all quarters and private colleges have been encouraged to open training classes. We cannot yet assess the quality of the training imparted at these new institutions but we can say that they are following the same pattern as the older institutions. The chart * which we attach will show that the number of applicants at the older institutions in proportion to the seats has gone down and this is explained not so much by the starting

* Not printed.

of the new institutions as by the fact that the profession of teaching has come to be even less prized than before. This is not the place to speak about the emoluments of the teachers in secondary schools but one has to note that the salaries are such as to attract only those who have failed to enter any other profession. As during the War period and for a year or two following it, the field of employment for graduates was extended, there were fewer people for the profession of teaching. The choice of students in these colleges has been made from two categories : (i) from those who are already teachers in schools and (ii) from fresh students. In some universities we were told that the " freshers " fare better than the experienced people because they have generally higher qualifications. As a teacher in a training college put it : " These fresh men are generally first or second class graduates, the others are made up of those who have entered this profession after futile hunting for other jobs."

We were not able to make an exhaustive survey of all training courses for graduates offered by universities or by training colleges, Government or private, throughout India. But we saw a representative sample of them. From what we saw it is plain that they vary very greatly in efficiency from one university to another. The best of them succeed in interesting their students, in giving them a blend of school practice under satisfactory conditions and of intellectual content adequate to make the students think about both the problems they confront in school practice and the wider philosophic and sociological implications of their profession. In the worst of them the school practice was completely insufficient and defective, while the theory was vague and unrelated to actual conditions.

4. *Education as a Branch of University Study* : Education as a study at university level is peculiar in this respect, that in whichever direction it is studied to an advanced level, the study tends to become something other than Education, e.g. it turns into a study of Philosophy or Psychology or History or Sociology. While this fact makes it easy for the pedantically minded to deny that Education is a real subject, it remains true that Education is an essential focal point for

the various studies and skills necessary for the tending teachers. It is also true and important, but by no means always grasped in Indian training departments and training colleges, that those responsible for training teachers must themselves look at the whole course from this focal point, i.e. the place of the school in the nation's life and the right training of children in the school. If this outlook is lacking the course will become distorted, even if the separate elements in the course are taught by quite learned and competent Philosophers, Psychologists, Historians and Sociologists. For if they are not continually aware of the professional needs of their students, their students will rightly feel that there is no unity in the course and that different specialists are simply trying to drag them in different directions, and this is a course whose length is all too short for what must find a place therein. Such specialist lecturers will also, unless they are "Education-minded", tend to regret the fact that they are "only" teaching Education students and will all the time be wishing that they were instead teaching "straight" History or Psychology or whatever their special subject may be.

A second peculiarity of Education as a university study, though this it shares with several other professional courses, is that it cannot possibly consist of theoretical instruction alone. Theory and practice must go hand in hand and each must support and throw light upon the other. In the ideal training course something like equal amounts of time and equal weight in assessing the student's result should be given to theory and to practice. On the one hand, nobody has ever yet been lectured into becoming a good teacher, nor even read himself into becoming a good teacher. On the other hand, if skill in practice were the sole aim, there would be no need for a course in theory, and a year's practical apprenticeship in a school could take the place of the existing training courses; but this is far from the truth, and unguided practice, or the unintelligent following of rule-of-thumb methods may do the beginner more harm than good, and is all the more likely to make him close his eyes permanently to all the truly satisfying elements in teaching as a worthwhile and lifelong vocation. It may well be that a young teacher whose initial

training had been wholly practical would be of greater immediate use to a school than one who had taken a full course in Education. But the latter ought both rapidly to overhaul the former in the continued acquisition of skill and also to be far less likely to sink into a routine and subsequently into discontent with the groove in which he finds himself.

5. *Criticism of the Existing Courses and Teaching*—(*a*) *School Practice*: Our main criticism of the existing courses (but we repeat that it does not apply to them all) is that too little time is given to school practice, too little weight is given to practice in assessing the student's performance, and conditions of school practice are often unsatisfactory, sometimes quite grossly unsatisfactory. In some places a student is required to give only five lessons during the whole of his course! We ascertained that in fact students were never failed on their practical test, and we enquired what happened if his five lessons were not deemed satisfactory. We were told that in that case the student gave another lesson, or even another, till he gave one that passed muster! It is not surprising that under these conditions the schools do not regard the possession of the B.T. Degree as the slightest real guarantee that its holder can either teach or control a class. We consider that in a year's course not less than twelve weeks should be spent by the student in supervised school practice. This does not mean that the supervisor should be present throughout the twelve weeks. Far from it. The student can only find his feet when he is left, from time to time, to his own unaided efforts.

We were told that it would be difficult to increase the amount of school practice because it would mean using more schools, and that schools did not like being used for practice. This did not convince us. In the first place, a training department has no right to admit a number of students greater than can be given proper school practice facilities. In the second place, it is not at all a difficult matter, and some Indian training departments have fully achieved it to make schools realise that students coming in to practice—not of course in overwhelming numbers—are a real asset. Almost all schools suffer from excessive routine, and the infusion of a little

temporary new blood from time to time in the form of students practising is good for all parties concerned, not merely the students but the teachers and the children. This is commonplace in America and Great Britain, and if universities in India cannot prevail upon sufficient schools to find it out for themselves, Government must come to the help of universities and make it a condition of aid, or even recognition, to suitable schools that they shall play their proper part in the practical training of the recruits whose services they subsequently intend to use. As it is, we came across such an absurdity, to take an extreme case, as the whole practical training, so called, for more than a hundred students being given in the one demonstration school attached to the college. This is perhaps twenty times as heavy a load as any single school should be asked to carry ; and under these conditions, what we have just said about students being an asset to a school becomes reversed. It is hard to see how a school can survive such a mass introduction of students.

When discussing this shortage of schools for practice we found a tendency to argue that a school could only be used when the college supervisor could dictate either the whole curriculum or at least the content of lessons to be given by the student. This is utterly wrong. It is good for students, and even good for their college supervisors, to have to fall in with the current practice of a school and make the best of it. Here again there are limiting cases, no doubt ; and the training department should have sufficient choice in the schools it uses to prevent it from having to use a school whose methods or tone were quite intolerably bad.

(b) *Experience of the Staff* Our second criticism (and again it is not to be applied to all places) is this. The career of a school teacher in India is certainly not well paid. Even if graduates tend to choose it as a last resort among professions, they can still be led by skilful handling of their training course to realise that it can be, as has been well said, " though the worst paid, yet the most rewarding of professions ". But it is quite impossible for this sense of vocation to be instilled by a staff who have never themselves taught in a school. They need not have many years of school experience, and there is

room on the staff of a training department for a few specialists who have not been school teachers. But the bulk of the staff including emphatically lecturers in Education and in Methods must be able to speak from first-hand experience of school teaching if they are to command the respect of their students, and to have any chance of convincing them that they are entering a noble career. In no respect did we find greater differences between one place and another than in this. In some, all the staff had had school experience. In others, not one of the staff had been a school teacher and, naturally enough in the circumstances, they saw no reason why they should have had such experience! It should be a condition of recognition for all training departments and training colleges that not less than a named proportion of the staff should have had school teaching experience; and the named proportion should be high, at least 50 per cent. If it is argued that, as things are, it is difficult to find school teachers intellectually capable of holding lecturers' posts, the answer must be that nothing would so quickly rectify this state of affairs as the knowledge that you could not hope to be a lecturer or professor in Education unless you had started by teaching in a school.

(c) *The courses in Theory* The content of the theoretical part of the courses needs no particular comment except that in those places where practice is so greatly neglected it is impossible to achieve what should be the aim of courses in Methods, in Psychology, and in Principles of Education, namely that they should be closely linked with what the student is seeing for himself in school during the practical part of his course. There is the further danger in an Education course where theory wholly outweighs practice, that there is less check upon the theorist and that courses in Method may become too specific, too detailed and incidentally too long; it is a misfortune if the student is led to suppose that there is only one right way of teaching a subject or that there is a perfect syllabus applicable to every school. Theory of Education must be flexible and adaptable to local circumstances if it is to mean anything real to its students. If it is simply something more to be learned by heart from lecture

notes and text books, the whole course will do the student more harm than good. It is a fundamental principle nowadays that real education is not so much a matter of lessons to be learned and memorised as of a life to be lived and purposeful activities to be shared. If this is true of a school it must be equally true of a university and of the training course which a university provides.

6. *Research in Education*—(*a*) *The Master's Degree*: There is not much systematic research in Education going on in India today. At a certain number of universities the Degree of Master of Education is conferred upon candidates who either stay on at the university after completing their initial qualification as teachers, generally the B.T. Degree, or who return to it for this purpose after an interval. The requirements for the Master's Degree in Education vary, but normally include a piece of original work prepared under supervision. Besides these first steps by beginners in original work the staffs of some training departments, though by no means all, are seriously engaged in original work. There are also a few centres for advanced work in Education or Educational Psychology, e.g. at the Government Centre at Allahabad and at the University of Patna. The first attempt at educational research at the all-India level is to be made by the newly-founded Central Institute of Education in Delhi.

Little can be said about the work of M.Ed. candidates except that it is a good thing for every university training department to have this task of guiding beginners in the technique of educational research even if the results are necessarily small and scrappy. It is very doubtful if a graduate who passes straight from his degree to his initial training course and thence straight to work for the M.Ed. without school experience can produce original work of value in the field of Education in the stricter sense, though no doubt he can learn techniques, statistical and other, which will be useful to him as an individual or as a subordinate member of a research team. Normally, however, it would be better for a student to learn more about the practice of education by teaching for a few years before he returned to take the Master's Degree in the subject.

(b) *Original Work by Professors and Lecturers*: The original work by Professors and Lecturers in Education is sometimes of high quality, but it seems to suffer, so far, from isolation and lack of inter-university planning. The problems confronting Indian education today are so stupendous in their sheer scale, and so complicated in their nature, that the efforts of even the most gifted and persistent individual seem dwarfish in comparison. In these circumstances immense responsibility lies upon the Central Institute, and its progress must be keenly watched, and keenly supported by every well-wisher of India. The practical problems of first magnitude confronting India are too obvious to need more than cursory statement. Here is a vast country, set out on the path of democracy with adult franchise; yet 85 per cent of its people are illiterate. Here too is a would-be democratic country where in fact up till now the selection of young people for higher education, or indeed for any education at all, has been based not upon any kind of test of the child's capacity but simply upon his parents' capacity to pay for schooling. It is going to involve a fundamental change, more profound than is yet realised by the vast majority of Indians, before we can achieve even the beginnings of an educational pyramid, i.e. a national structure in which all children get the rudiments of education (and are not thereby unfitted for manual labour), and the choice of who shall proceed further and further up the educational pyramid is based upon capacity and temperament alone. The mere effort needed to construct tests of capacity and temperament for use on a nation-wide scale and flexible enough to be fair as between different social strata and different physical environments will be a most difficult and lengthy task, which has not yet been begun. The Central Institute should enlist the services not only of its own staff or of its own University of Delhi, but of all would-be students and teachers of Education throughout India. No task in front of India seems to us more urgent than this.

7. *Recommendations*: We recommend:—

(i) that the courses be remodelled and more time given to school practice and more weight given to practice in assessing the students' performances;

(ii) that suitable schools be used for practical training;

(iii) that students be encouraged to fall in with the current practice of a school and make the best of it;

(iv) that the bulk of a staff of the training college be recruited from people who have first-hand experience of school teaching;

(v) that the courses on the theory of Education be flexible and adaptable to local circumstances;

(vi) that students be encouraged to proceed to the Master's Degree only after some years of experience of teaching; and

(vii) that original work by Professors and Lecturers be planned on an all-India basis.

ITEM No. 5(b) OF THE AGENDA

Ordinances and Regulations of the L.T., Dip.Ed., B.Ed. and B.T. Examinations of Indian Universities

1. *Provision*: Of the 28 Indian universities—

1 confers the L.T. degree;
2 confer a Diploma in Education (Dip.Ed.);
4 confer the B.Ed. degree; and
17 confer the B.T. degree.

Three universities have no faculties in Education and the University of Allahabad provides for the M.Ed. examination only.

2. *Procedure adopted*: In giving here the ordinances and regulations of Indian Universities re: the training courses for graduate teachers, the following procedure was adopted:—

(1) The course for the L.T. degree which is provided only in the University of Lucknow is given first;

(2) The B.Ed. degree is conferred by the Universities of Andhra, Banaras, Osmania and Rajputana. Their courses are given next.

(3) The Patna and Utkal Universities confer a Diploma in Education. Their courses are given next.

(4) The courses of the following 17 universities which confer the B.T. degree are given last:—

1.	Agra	10.	Madras
2.	Aligarh	11.	Mysore
3.	Baroda *	12.	Nagpur
4.	Bombay *	13.	Poona *
5.	Calcutta	14.	Saugor
6.	Delhi	15.	S.N.D.T. Indian Women's University
7.	East Punjab	16.	Srinagar
8.	Gauhatti	17.	Travancore
9.	Karnatak *		

* The courses in all these four universities are the same at present.

(5) The detailed syllabuses in *Special Methods* or *Courses* and lists of *Books Recommended* are *omitted* for considerations of space.

THE L.T. DEGREE

3. *Lucknow University*: Lucknow is the only University in India which confers the L.T. degree. Its ordinances and regulations on the subject are given below :—

1. The examination for the Licentiate in Teaching shall be both in the Theory and Practice of Teaching. There will be *four* papers in theory and an examination of *two* lessons in Practice of Teaching.

The four papers are as follows :—

(*a*) Educational and Experimental Psychology.

(*b*) History of Education.

(*c*) Principles and Method of Education.

(*d*) School Management and Hygiene.

For women candidates who desire an endorsement on their diploma of a qualification to teach singing, there will be an oral examination including (1) a test song, (2) sight reading test, and (3) ear tests.

A paper will also be set in each of the special subjects offered by candidates who desire to have an edorsement on the diploma of special qualifications for teaching one or more branches of the High School curriculum.

In the Practice in Teaching every candidate shall be expected to deliver at least 60 lessons during the session in addition to 20 supervised lessons in special subjects, if offered.

2. (*a*) The Practical examination shall be conducted by three examiners one of whom shall be internal.

(*b*) Every candidate shall teach two lessons in subjects embraced in the High School curriculum at least one of which must be one of the main subjects of the curriculum, e.g. English, Hindi, History, Geography or Mathematics.

(*c*) The examination in the Practice of Teaching shall be conducted in a practising school approved by the Department, and the examiners shall also take into consideration the work done by the student during the course of training.

(*d*) At the time of the examination, the examiners will have before them the opinion of the Head of the Department on each candidate. The examiners will give full consideration to this opinion in awarding marks, but the final decision will be with the examiners.

(*e*) The candidates shall receive due notice of the subjects in which they will be asked to give a lesson.

3. Candidates who fail in the examination either in the Theory of Teaching or Practice in Teaching may present themselves for re-examination therein at a subsequent examination, without attending a further course provided that they produce satisfactory evidence that, in the interim period, they have been teaching in a recognised institution.

(*a*) Candidates who desire to have an endorsement on their diploma of special qualifications for teaching any subjects of the High School curriculum, may take an additional paper in any of the special subjects offered.

(*b*) Those desiring this endorsement must submit their names for a special examination in a specified subject. With the approval of the Department the examination will be given, and an indication of special qualifications for teaching this subject will be given on the diploma of successful candidates.

(*c*) For these candidates one of the practice teaching lessons delivered for the examination shall be on the subject in which he/she specializes.

(*d*) No such endorsement will be given unless the candidate secures at least fifty per cent marks in both the written paper and the practical examination in the special subject.

If the candidate fails in this special paper he/she will get an ordinary diploma without the endorsement.

4. Holders of the Licentiate in Teaching may at any subsequent examination appear for a special examination in theory and practice in any additional subject provided that—

(*a*) they take the regular course prescribed for the special subject;

(*b*) they teach twenty supervised lessons;

(*c*) they obtain fifty per cent marks in both the written and practical examination in the special subject.

5. The Scheme of Examination and standard of passing will be as follows:—

Four Papers, each	100 marks.
Practical Test (one hundred marks for each lesson)	200 marks.

Time allowed for each Paper: 3 hours.

Minimum pass marks in Theory shall be 36 per cent of the aggregate marks for the four papers.

Minimum pass marks in Practical Test: 36 per cent.

The candidates must gain at least 24 per cent of the maximum marks for each Paper separately.

Successful candidates shall be placed in three divisions, both in Theory and Practical examination separately as under:—

First Division—candidates obtaining 60 per cent or more of the aggregate marks

Second Division—candidates obtaining not less than 48 per cent and not more than 59 per cent of the aggregate marks

Third Division—candidates obtaining not less than 36 per cent and not more than 47 per cent of the aggregate marks

Special Subject—one paper (100 marks)

Practical Test (100 marks)

Minimum pass marks in Practical and Theory separately (50 per cent)

Time allowed for each written paper: 3 hours.

SYLLABUS

Paper I:—Educational and Experimental Psychology.

Section A.

1. Nature and Scope of Educational and Experimental Psychology.

2. Technique and Methods specially in relation to Education.

3. Organism in relation to Environment: Heredity and Environment.

4. Response mechanism: Reflexes, Instincts, Drives—a general treatment.

5. Sensory Processes and Training of the Senses.

6. Perceptual processes: size, form, distance, depth, time, rhythm.

7. Attention—factors of advantage, Training of Attention.

8. Learning—nature, laws, curve, methods, transfer of training.

9. Memory—retention, preservation, recall, recognition, association. Factors favouring animal and human learning.

10. Imagery—types, imagination and its development.

11. Thinking—nature and development in children, concepts, reasoning.

12. Emotion and affective processes. Organic basis, training.

13. Work and Fatigue—Work curve, mental and muscular, incentives to work, causes of fatigue.

14. Intelligence—measurement and tests.

15. Personality—types, extroversion and introversion, analysis and tests.

Section B.

1. Statistical Methods in Education—Mean, Median, Mode, Mean variation, Standard variation, Co-efficient of Correlation.

EXPERIMENTS

2. (*a*)—Determination of Colour Sensitivity and Auditory actuity. To determine the two-point Limen. To determine the Curve of Memorising, Image Type determination, Substitution and Practice.

(*b*) Tests—Intelligence tests, Performance tests for Primary Classes, and Achievement Tests for Primary Classes.

Paper II.—History of Education:

1. A study in outline of the educational theories of Plato, Aristotle, Commenius, Locke, Rousseau, Pestalozzi, Herbart, Froebel, Spencer, Dewey: Modern Tendencies in Educational Theory.

2. Brief Survey of History of Indian Education.

3. History of the Development of Educational organisation in India from 1815.

Paper III.—Principles and Methods of Education:

1.—*Principles of Teaching.*

Child study and its value to the teachers. The meaning, aims and major present needs of Education: Function of the School; Principles determining the Curriculum.

2.—*Methods of Teaching.*

(*a*) *General*: Montessori Method; Dalton Plan; Project Method; Kindergarten; Decroly; Basic Method; The teacher's preparation; Notes of lessons; Types of lessons; Induction and Deduction; Problem Method.

Oral Exposition; Illustration; Questions and Answers. Use of the black-board; Correction of pupil's note-books and written work; Diaries and class records.

(*b*) Methods and apparatus of teaching the various subjects of the curriculum of Secondary Schools in India.

Paper IV.—School Management and Hygiene:

(*a*) The School building including hostel and outhouses; Study of standard designs: Furniture and fitting; Apparatus.

The Headmaster and his duties; The Staff; Distribution of work; The class teachers and the specialist; staff meeting; Classification of pupils; The curriculum; Time-Tables; Correlation of subjects, Examinations; Marks, Promotion; Home work; School Libraries.

Class management; Discipline within and without the class rooms; Moral training; Rewards and Punishment; Corporate life; Pupil self-government; Hostel life and Superintendence; Parental co-operation; Office and School records.

(b) Study in outline of the human body; Factors influencing health and growth; Personal cleanliness; School Postures; Physical Exercises; Fatigue; Organised games.

Defects of eye-sight and hearing; Dental disease; Common minor ailments, their identification and treatment.

Infectious diseases; Disinfection; Simple accidents; First Aid.

The hygiene of the School; Arrangement of class-room.

Lighting and ventilation; Over-crowding; Water Supply.

Sanitation of the school and hostel; The object and method of medical inspection.

Paper V.—(Optional).

(For candidates offering a Special Subject).

A.—Special Course.

In addition to the ordinary course, students are encouraged to specialise in the methods of teaching the subjects of the High School Curriculum as well as other special features of Educational work. In all the special subjects practical as well as theoretical work is required.

The subjects recognised for specialisation are:—

(a) Methods of teaching:

Hindi.
Urdu.
Mathematics.
History.
Geography.
English.
Art and Craft.
General Science.
Nursery School.
Library Science.
Physical Education.

(b) Special Features of Educational work:

1. Mental Testing.
2. Educational and Vocational Guidance.
3. Mental deficiency.
4. Retardation, temporary and permanent.
5. Neurosis among School children.
6. Library Science.

(Detailed syllabuses in Special Courses are omitted).

B.—Practice in Teaching.

(*a*) In the Practice in Teaching every candidate must deliver ***at least sixty*** supervised lessons. Students must do some teaching in at least *three* of the subjects of the High School Curriculum, one of which must be a main subject.

(*b*) They must teach *twenty* supervised lessons in the subject offered for specialisation in addition to sixty lessons required in (*a*).

(*c*) They must obtain fifty per cent marks in both the written and practical examinations in the specialised subject.

C.—Observation.

Students will be required to observe at least *ten* lessons as arranged by the supervisors.

D.—Criticism Lesson.

Students will be required to do at least *one* criticism lesson.

THE B.Ed. DEGREE

4. *Andhra University*: The Andhra University provides for the B.Ed. examination. Its regulations and ordinances are given below:—

1. *Conduct of Examination*: The examination shall consist of (*a*) a practical examination in teaching conducted by a Board of two examiners for each lesson, who shall as a rule be members of the staff of the college presenting the candidates for examination, and (*b*) a written examination conducted by means of printed papers.

2. *Subjects for the Examination*: The B.Ed. Degree Examination shall consist of three parts of which Parts I and II comprise the *written Examination* and Part III, the *Practical Test.*

Part I shall consist of three papers, *viz.*,

(i) Theory and Practice of Education—Part I.

(ii) Theory and Practice of Education—Part II.

(iii) History of Education and the comparative study of Educational Systems.

Part II shall consist of two papers, viz., Methods appropriate to the teaching of any two of the following Special Subjects:—

(*a*) All subjects taught to young children.

(*b*) Mathematics.

(*c*) Physical Science.

(*d*) Natural Science.

(*e*) History.

(*f*) Geography.

(*g*) Music.

(*h*) An Indian Language.

(*i*) English.*

The written papers shall each be of three hours' duration and shall carry 100 marks each.

Part III shall consist of the Practical Examination in teaching and the practical work done at the college.

3. *Marks qualifying for a pass*: A candidate shall be declared to have passed the B.Ed. Degree Examination if he obtains:—

(1) not less than 35 per cent of the aggregate marks in Part I;

(2) not less than 35 per cent of the marks in each of the papers comprising Part II but not less than 40 per cent of the aggregate marks in those two papers; and

(3) not less than 40 per cent of the aggregate marks in the practical work done at College and in the Practical Examination in Teaching in Part III.

Of the candidates who pass all the three Parts of the examination in the same year, those who obtain not less than 60 per cent of the total number of marks in all the three parts of the examination taken together shall be placed in the first class, those who obtain not less than

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* One of the subjects shall be the same as the subject which the candidate specialized for the Degree examination qualifying for admission to the course, provided that, in the case of Natural Science Graduates, the subject shall be Physical Science until Natural Science Sections are opened in any of the Training Colleges affiliated to the University and that, in the case of all other graduates for whose special subjects there is no provision for training in the Training Colleges, the subject shall be Geography.

The second subject shall be either Geography or a subject studied by the candidate under any part for the qualifying Degree Examination, provided that, in the case of a candidate who is not a B.A. degree-holder, the subject so selected may not ordinarily be English.

In the case of B.Com. (Pass), B.Com. (Honours) and B.A. (Honours) degree-holders in branches of study for which there is no provision for training in the Training Colleges, the special subjects shall be as follows:—

First subject—Geography.

Second subject—English.

50 per cent of the marks in the second, and the rest in the third class. Successful candidates obtaining not less than 60 per cent of the total marks (in theory and in practical test) in any Special subject shall be declared to have obtained distinction in that subject.

SYLLABUS

(1) *Theory and Practice of Education*

PART I

A.—GENERAL :

The need of a theory of education—relation of theory to practice.

The meaning of education—education as the process of adjustment between the individual and the environment—other concepts (Preparation, unfoldment and formal discipline).

The aim of education—the nature of an aim—general and specific aims.

The agencies of education—the family, the social community, the church, the State and the School—the evolution and function of the school—the nature of the school environment.

Other agencies operating at the present day—libraries, museums, cinemas and broadcasting.

The function of the teacher—bi-polar and tri-polar relation. The modern views regarding the influence of the personality of the teacher —the scientific and cultural presuppositions of the teacher's work.

B.—PSYCHOLOGY IN RELATION TO THE CHILD'S DEVELOPMENT :

1. *Heredity and Environment and the Significance of Infancy.*

Heredity as a condition of development—the inheritance of physical and mental traits.

Environment (social heredity) as the other condition as an originating and selecting agent—the possibilities of estimating the relative influences of heredity and environment.

The theory of the inheritance of acquired characters and its bearing on education.

The prolongation of human infancy and its sociological and educational significance.

2. *The Physiological basis of Mental processes.*

The constitution of the nervous system—the localisation of brain functions—the action of the nervous system.

The Mental Processes.

(*a*) *The Affective and Conative Processes*

Pleasantness—unpleasantness—aspects of consciousness. Definition of Instinct and Emotion.

Instincts of pugnacity, flight, curiosity, disgust, sex, self-assertion, submission and appeal and constructive, acquistive and parental instincts.

Imitation and suggestion.

Play; differences between play and work, make-believe, the play-spirit in education.

Distinction between instinct and habit—nature and importance of habit—principles of habit-formation.

Volition: inhibition and direction.

Primary and Secondary emotions.

Sentiment—temperament—mood.

The Unconscious; libido, repression, sublimation, complexes, etc.

The growth of group and moral consciousness.

Attention—factors involved, classification, difference between adults and children, pedagogical application.

Relation of attention to interest—nature and kinds of interests—development of interests—classification of interests.

Fatigue—its causes, symptoms, effects and remedial measures.

(*b*) *The Cognitive Processes*

Sense—perception and development—Perception of quality, space and time—training in sense perception—pre-perception and apperception—the doctrine of apperception.

Memory—classification and favourable conditions—reminiscence and obliviscence—difference between adults and children—economical methods of memorisation.

Learning methods—learning curves—plateau stages.

Transfer of training—the traditional view—experimental result—interference—the limits of transfer.

Imagination—factors involved—individual differences in imagery—growth of imagination—differences between adults and children—training in imagination.

Thinking and reasoning—types of thinking—steps in thinking—concrete and abstract thinking—training to think.

General intelligence—its measurement—The uses of intelligence tests—Principles of test construction.

Part II

A.—School Hygiene :

General conditions of healthy life and growth—characteristics of successive stages of physical development.

School hygiene—school site and buildings—lighting and ventilation—playground—furniture.

Common ailments of children and how to detect them—infectious diseases.

Detection and avoidance of fatigue and overpressure.

Physical training, gymnastics, drill, games and free-play.

B.—School Organisation

The school and its divisions—school departments—size of departments—co-education *v.* separation—special classes—one teacher schools—the class as a working unit—size of classes—the staff—qualifications and adequacy, etc.—classification of pupils—time-tables for different grades of schools—examinations external and internal—promotion and its different bases—school records and their proper maintenance.

C.—Instruction :

(*a*) *Material.*

Criteria for selecting material of instruction.

The elements of the environment and the needs of the various stages of development as determining the curricula for infant, primary and secondary grades of education.

Theories of recapitulation—the psycho-physiological theory and the culture epoch theory.

The scope and sequence of school studies.

Co-ordination, Correlation and Concentration.

(*b*) *General Principles of Method.*

The nature and general principles of method—teaching and learning processes—logical and psychological methods—the maxims of methodological procedure—the formal steps—types of lessons—inductive, deductive, drill, review, appreciation and how to study lessons.

Forms of instruction suited to different ages of pupils and in different subjects—devices of teaching—exposition, illustration, questioning, etc.—the use of black-board and of other class-room apparatus. Lesson plans—Modern individualistic tendencies as exemplified in supervised study, the Gary system, the Project method and the Dalton plan.

D.—Discipline :

Moral instruction and training. The aim of moral training. The chief factors in moral training—(i) corporate life of the school, (ii) personal influence, and (iii) non-personal influence.

The corporate life of the school—school community—mutual rights and obligations—schools, societies and other organized groups—school government—school laws, their character and enforcement—juvenile delinquency—rewards and punishments, their nature and kind—pupil self-government and its forms.

Influence—government—discipline—personal influence of the teacher and "the leaders of the groups". Non-personal influence of the curriculum and other school activities.

Day and Boarding schools and leisure time of pupils.

The relation of the school to other communities with kindred interests.

(2) *History of Education and Comparative Study of Educational Systems*

A.—Indian Education :

Education during the Company period: Early activities in Madras and Calcutta. The part played by the Missionaries and Government. The decision of 1835 and its results. The despatch of Sir Charles Wood in 1854 and the foundation of the modern system. The rise of the Universities.

Education under the Crown: The Education Commission of 1882 and the development of education till 1900. The Indian Universities Commission of 1902. The Calcutta University Commission. The creation of new Universities. Montford reforms and education. Compulsory Education Acts and Educational Control. A general review of the present system of education.

B.—European Education :

The educational aims and ideals of Rousseau, Pestalozzi, Froebel and Herbart—their influence on modern educational theory and practice.

C.—A Comparative Study of Educational Systems :

The 19th Century and the movement for national education.

A national system, an expression of the national genius. Influence of historical, geographical, ethnological, political and economic factors. The aim of a national system of education.

The national systems of education in England, United States of America, Germany and Japan, with reference to the administrative arrangements—Local and central control—organisation of education and

types of schools, elementary, secondary, continuation, vocational and special schools for boys and girls. Provision for the training of teachers for elementary and secondary schools. Child welfare movements, such as medical inspection, feeding of necessitous children, movement for playgrounds, open-air schools, sanitoria, etc.

Tendencies of post-war education.

(Detailed syllabuses in Methods of teaching special subjects are omitted here).

5. *Banaras University*: The ordinances and regulations of the B.Ed. degree of this university are given below:—

1. The Examination shall be both in the Theory and Practice of Education.

2. A candidate may, in addition, offer as an extra subject, special course in the Methods of Teaching one of the subjects prescribed for the Admission Examination or *one* of the following subjects:—

(1) Basic Education
(2) Infant Education
(3) Experimental Education
(4) Adult Education
(5) Vocational Education
(6) Physical Education
(7) Linguistic Pedagogy
(8) Art
(9) Sculpture
(10) Music
(11) Spinning and Weaving

3. A candidate who passed the B.Ed., B.T. or L.T. Examination of the University in a previous year may be permitted to take a special course in the method of teaching a subject if he did not offer a special subject in the year in which he passed the Examination, or, in case he passed with a special subject, he may be permitted to take a special course in a subject other than the one offered by him for the examination, provided that, in each case he studies in a constituent college for at least three calendar months and completes the required Theoretical, Sessional and Practical work.

4. Every candidate shall be required to undergo a course in class teaching and shall, further, in the presence of at least two examiners appointed by the Syndicate, give satisfactory evidence of ability to teach and manage a class. *He shall give two lessons in subjects embraced in the curriculum of High Schools one of which, at least, in the case of*

graduates in Arts, shall be in a language, and in the case of graduates in Science, in Mathematics, Nature Study, Physics or Chemistry. The candidates shall receive due notice of the subjects in which they will be required to give lessons.

The Examination in the Practice of Education shall be conducted at the Training College, or in some school used for Practical Training.

5. Every male student shall be required to undergo a course of Physical Training.

6. Candidates who fail in the Examination in the Theory of Education may present themselves for re-examination therein at a subsequent examination without attending a further course at the Training College, provided that they produce satisfactory evidence that, in the interim, they have been teaching in a recognised institution.

7. (*a*) A candidate who at his last appearance at the B.Ed. Examination failed only in the Practice of Education shall be allowed to appear in the Practical Examination in a subsequent year with the special permission of the Syndicate provided he keeps regular terms for four calendar months and gives at least 60 supervised lessons.

(*b*) Such a candidate shall be declared to have passed the Final Examination on his obtaining at least 45 per cent of the total marks in the Practice of Education.

8. The Subjects of the Examination are the Theory and Practice of Education.

(A) THEORY OF EDUCATION

There will be four papers set as follows :—

(1) Principles of Education.

(2) History of Education.

(3) Methods of Teaching.

(4) School Management and Hygiene.

SYLLABUS

(1) *Principles of Education*: Meaning of Education, aims and agencies. Psychology and Education. Influence of nature and nurture as factors in child development. Instincts, distinguished from reflexes, classification of instincts, development of instincts. Habits, their formation and character. General nature and growth of mind. Sensation, perception, imagination, memory and association. The doctrines of attention and interest in relation to learning. Educational values of different types of experience, principles of curriculum making, intellectual and logical training, problems of transfer of training. Moral education of the young, the growth of sentiments, development of will,

formation of character, sex education, problems and methods of child-study as applied to schools. Educational value of Child-Study, the measurement of mind, and treatment of exceptional children.

2. *History of Education*:

(*a*) Outline study of the educational theories of the following:— Rousseau, Pestalozzi, Froebel, Herbart, Montessori and Dewey.

(*b*) Outline study of the development of Education in India.

(c) Special study of the Hindu Ideals of Education including the relations between teachers and pupils.

3. *Methods of Teaching*:

A. *General*:

(1) Choice and scope of studies: their relative importance and standard of attainment at the Primary and High School stage. (2) the problem of correlation of studies in Indian High Schools. (3) Typical methods of procedure: (i) Oral method. (ii) Herbartian method. (iii) Analytic and Synthetic methods. (iv) Inductive and Deductive methods. (v) The Heuristic method. (vi) The Laboratory method. (vii) The Project method. (4) Varieties of lessons. 1. Information lessons. 2. Training lessons. 3. Drill lessons. 4. Review lessons. (5) Planning of lessons and steps in the process of teaching. Notes of lessons. (6) Devices of Teaching: 1. Questioning. 2. Answering. 3. Explanation. 4. Exposition. 5. Illustration. 6. Description. 7. Correction of mistakes: Oral and written. 8. Fixing devices: repetition, recapitulation, B. B. summaries, etc. 9. Presentation of objects, pictures, etc. in the class-room.

B. *Special*:

A knowledge of the methods of teaching at least three subjects of the school curriculum will be expected of all candidates. A general acquaintance with the following points in connection with the teaching of the subjects will be required:

Aims of teaching each subject of the curriculum of High Schools and Intermediate Colleges in India; its relative importance at different periods of school life; variation in its syllabus and methods at different stages—the Primary, Middle, High and Intermediate; provision and use of apparatus and other accessories necessary for each subject; special devices to be employed in its teaching; correlation of subject with subject; notes of lessons.

(Detailed syllabuses in Methods of teaching English, Hindi, Sanskrit, Mathematics, History, Geography, Science and Handwork are drawn up. These have been omitted here.)

4. *School Management and Hygiene.*

(*a*) The school, its function and relation to society. Meaning of school management. The site, design and special needs of the School, Hostel and Laboratory buildings. Furniture and fittings. Apparatus.

The Head Master, his qualifications and duties. His relation with the assistants, the guardians and the public. The Assistant Master and his duties. The need for team work.

Time-table ; correlation of subjects ; home work ; school library ; admissions, examinations and class promotions ; the school office and records.

Discipline and tone of the school. Disciplinary value of moral training. Corporate life in School and Hostel. Scouting, its aims and methods. Extra-curricular activities like excursions, school dramatics, debating society, literary societies, school magazines, school museums, hobbies, self-government among pupils, open-air session, school assemblies, etc. Parental co-operation. Manners of students. Their postures while at work.

Class management. Means of securing attention, order and application to work. Value of good teaching and good management on the discipline of a class.

(*b*) An outline study of the human body with special reference to childhood.

Personal cleanliness, postures, physical exercises, organized games, fatigue, nourishment, etc. and their influence on the health and growth of pupils.

Vital organs (Heart, Lungs, Intestines and Kidneys) and their care. Eyesight, hearing and teeth ; how to take care of them. Common infectious diseases, their symptoms and prevention. Disinfection. Simple casualties and first aid.

Arrangement of class rooms, lighting and ventilation ; accommodation and water supply with reference to hygienic requirements. Medical inspection of pupils, sanitation of the school and hostel surroundings, including urinals, latrines, etc.

Note—(i) The College holds its own examination in Physical Training, Music, and Scouting, and the results are noted in the testimonial.

(ii) Those who want to specialize in the methods of teaching a subject are given a separate paper by the University (Paper V) and the Sessional work is also examined and assessed.

(B) PRACTICE OF EDUCATION

This will consist of the following :—

(*a*) Attendance at Demonstration Lessons given by the members of the staff of the College, the Central Hindu School and other practising schools.

(*b*) Observation of Criticism Lessons given in the subjects taken up by a pupil teacher.

(*c*) Practice of Teaching carried on ordinarily in three subjects for at least three months under the supervision of the College Staff.

(*d*) Two Criticism Lessons given in the subjects offered by a pupil teacher.

Note.—(i) Every pupil teacher is required to record his impressions and remarks upon the Demonstration and Criticism Lessons attended by him in an Observation Note-book provided by the College.

(ii) A formal report of Practical Teaching and Criticism Lessons is submitted by the members of the College Staff to the Principal who in consultation with the professors in charge of practical work awards marks out of 100 on the year's work in teaching.

(iii) Marks out of 100 are awarded on the result of Practical Examination held at the end of the year.

9. *Standard of Passing* : The minimum pass marks required to be obtained are—

General

Minimum pass marks in the total of the papers in theory : 33% of the aggregate.

Minimum pass marks in practical teaching : 35% of the aggregate.

Minimum Marks for Ist Class 60% of the aggregate and over.

Minimum Marks for II Class : 45% of the aggregate and over.

Minimum Marks for III Class : 35% of the aggregate and over.

Special

Minimum pass marks in Special Subjects (English, Mathematics, History, Geography, Hindi and Science)

Special Paper 45% of the aggregate.

Sessional Work 45% of the aggregate.

Practical examination : 45% of the aggregate.

Minimum Marks for distinction : 60% and over.

Minimum pass marks in Experimental Education, Basic Education, Physical Education, Adult Education, Vocational Education and Linguistic pedagogy:

Special Paper: 45% of the aggregate.

Sessional Work: 45% of the aggregate.

Practical Work: 45% of the aggregate.

(The detailed syllabuses in the special courses mentioned in regulation 2 above have been omitted.)

6. *Osmania University*: The ordinances and regulations of the Osmania University for the B.Ed. examination are given below:—

1. The course of study shall consist of lectures, select readings, discussions in conference and practice in the teaching and handling of classes.

2. The examination shall be a written examination conducted by means of written papers. Besides the written examination there will be a practical examination in the teaching of at least one of the two subjects selected under Paper V. In determining the standard due regard will be paid to the class record in practical work.

3. A candidate who has failed to pass in the written or the practical examination or both may be allowed to reappear for the examination in the written or the practical part or both without putting in further attendance, provided he does not change the subject or subjects originally selected by him and provided also that he produces evidence to the satisfaction of the Head of the Dept. or Dean of the Faculty of Education to show that he has given not less than 15 lessons during the year.

4. In the Practice of Teaching every candidate shall be required to give during the year under proper supervision at least 30 lessons.

5. The course shall include also the following additional subjects but no examination will be held therein:—

(a) Drawing and Blackboard illustration.

(b) Manual Training or Nature Study and Gardening.

(c) Physical Training.

6. The distribution of marks shall be as indicated in the scheme of examination and the scope as indicated in the syllabus.

SCHEME OF EXAMINATION

Theory: Five papers—100 marks each.

Time allowed for each paper: 3 hours.

Practical: (i) Record of Teaching work: 100 marks.
(ii) Teaching of one lesson: 100 marks.

Pass Marks

Minimum pass marks in each paper: 36%.

Minimum pass marks in Practical: 36%.

Minimum pass marks in the aggregate of Theory and Practical: 36%.

Divisions

1. Theory:

First division: 60% and above of the aggregate marks in Theory.

Second division: Below 60% but not less than 48% of the aggregate marks in Theory.

Third division: Below 48% but not less than 36% of the aggregate marks in Theory.

2. Practical:

First division: 65% and above of the aggregate in Practical.

Second division: Below 65% but not less than 50% of the aggregate in Practical.

Third division: Below 50% but not less than 36% of the aggregate in Practical.

The examination shall comprise of five papers and a Practical examination:

Paper I—Principles of Education.

Paper II—History of Education.

Paper III—Educational Psychology.

Paper IV—School Organisation and School Hygiene.

Paper V—Methods of Teaching any *two* of the following subjects:—

English, History, Mathematics, Geography, Physical Sciences, Biological Sciences, Ancient Languages, Modern Languages, Theology Subjects and Ethics.

The following syllabus is prescribed:—

Paper I.—*Principles of Education*:

Historical approach: Ideals and practice in Ancient, Medieval and Modern times.

Scientific approach: Aid of Biology, Physiology, Psychology, Sociology, Statistics, etc.

Aims of Education and their evaluation Livelihood, Social efficiency, Character, Leisure.

Educative process: Nature of environment. Principles and subjects of the curriculum. Aspects of Method. Theories underlying some modern methods, e.g. the Montessori Method, the Dalton Plan, the Project Method, the Winnetka Plan, the Shantiniketan and the Wardha Schemes.

Paper II.—*History of Education*:

Brief review of the Hindu, Buddhistic and Islamic systems of education in India.

Contributions of Commenius, Locke, Rousseau, Pestalozzi, Herbart, Herbert Spencer, Froebel, Montessori and Dewey to modern educational thought.

Early beginning of Western education in India. Macaulay's Minute. Development of Western education in India.

Recent developments in India. Women's education. National educational movements and educational experiments in India.

A brief Historical Survey of some of the recent trends and tendencies in Education.

Paper III.—*Educational Psychology*:

Psychology and its relation to Education. Nervous system and its functions. Heredity and Environment. Instincts. Sensation. Perception. Imagination. Memory, Conception. Reasoning. Emotions. Volition. Habit formation. Attention. Interest. Fatigue. Play. Imitation and Suggestion. Laws of learning, illustrated by reference to Handwriting, Reading, Arithmetic, Spelling, Poetry, etc. Problem of Discipline. Stages of development.

Intelligence—Its nature and measurement. Educational Tests—Their uses and value. Care of the exceptional children.

Paper IV.—*School Organisation and School Hygiene*:

(i) School Organisation

Material condition: Site, Building, Rooms, Lighting, Ventilation, Furniture, Playground, Garden, Sanitary Arrangements.

Management: Staff meeting. Time-table. Libraries. Museum. Cooperation between School and Home. School office and Records.

School Life: Corporate life. School Assembly. Clubs, and Societies. Hobbies. Self-Government. Games. Scouting. Excursions. School Magazines. Exhibitions. School Celebrations.

Hostel: Location. Supervision. Sanitation. Equipment. Traditions.

Staff: The Headmaster and his duties. Class teacher *v.* Subject teacher and his relation to others. Inspection. Professional Etiquette. Professional Organisation.

General: Classification of Schools; Discipline. Classification and promotion of pupils. Home-work. Co-education. Examinations.

(ii) School Hygiene

Outlines of Anatomy and Physiology. Diet. Clothing. Cleanliness. Mental and Physical Fatigue. Senses and their Training. Cure and Prevention of Defects and Diseases. Infectious diseases. Physical education. Sex education. Medical Inspection. School Hygiene. School Buildings and surroundings. Furniture and equipment. First Aid in minor injuries and ailments. Health Legislation affecting schools.

Paper V.—*Methods of Teaching*:

(i) *The Teacher's Preparation*: Notes of lessons. Types of lessons. Induction and Deduction. Heuristic Method. Problem Method. Oral Exposition. Illustration. Questions and Answers. Use of the black-board. Correction of pupil's notebooks and written work. Diaries and Class Records.

(ii) Methods and apparatus of teaching the various subjects of the school curriculum with reference to the following points:—

Aims and values of the subject. Content and its organisation. Various methods of teaching the subject. Schemes and Notes of lessons. Correlation with other subjects.

Note.—For study of the selected subjects syllabuses may be prescribed as the occasion arises.

Practical Course.

The Practical course shall consist of:—

(i) Record of Teaching work done under proper supervision during the course of training including Lesson Notes, Laboratory work, Note-books, etc.

(ii) Test in Method and Practice of teaching. (The test will include at least one lesson to be given to a class, on any two subjects specified under Paper V.)

7. *Rajputana University* The following are the ordinances and regulations of the Rajputana University for the B.Ed. University:—

1. A candidate who, after taking the Bachelor's or Master's degree of this University or some other Indian University recognised for the purpose by the Syndicate, has completed a regular course of study in a college affiliated or recognised for the purpose for one academical year and has during the course of the year delivered at least 60 lessons in a recognised school under the supervision of the staff of the college may be admitted to the examination for the Degree of Bachelor of Education.

Note.—A person who passes the B.A. Examination in English only or takes the Master's Degree in a language after passing the B.A. Examination in English only shall not be eligible for admission to the examination for the B.Ed. degree.

2. Every candidate shall be required to show a competent knowledge of the following:—

PART I

(1) Principles of Education.

(2) School Organisation and Hygiene.

(3) Methods of teaching—

(*a*) General Methods; and

(*b*) Methods of Teaching School Subjects.

(4) History of Education.

PART II

(5) Practical skill in Teaching.

3. A candidate may in addition offer a special course in the methods of teaching a prescribed High School subject.

4. Every candidate shall be required to have undergone a course of training in (*a*) Physical Education, and (*b*) Educational Handwork and gardening.

Women candidates may be exempted from (*a*) above.

5. The Division at the B.Ed. Examination shall be assigned separately for Theory and Practice as follows:—

First Division: 60 per cent of the aggregate marks in theory and practice separately.

Second Division: 48 per cent of the aggregate marks in theory and practice separately.

All the rest in the Third Division if they obtain the minimum pass marks as set forth below:—

The examination shall comprise four papers and a practical test—

Paper I—Principles and Psychology of Education (100 marks).

Paper II—School Organisation and Hygiene (100 marks).

Paper III—Methods of Teaching—Part I—General (40 marks) and

Part II—Methods of teaching school subjects—English, History, Geography, Mathematics, Sciences, Anatomy, Physiology and Hygiene, Modern Indian languages (60 marks), total 100 marks.

Note.—In Part II, two questions shall be set on each of these subjects and every candidate shall have to attempt at least three such questions.

Paper IV—History of Education (100 marks).

Minimum pass marks 36 per cent, with a minimum of 25 per cent in each paper.

Practical Test (200 marks). Minimum pass marks 80.

Notes.—(1) Every candidate shall give satisfactory evidence of ability to manage a class and shall give two lessons in subjects specified in Part II of Paper III in the presence of the examiners.

(2) The record of practical work in the college will be taken into consideration while assigning marks for practical test.

(3) For this purpose, the Head of the Training College shall maintain a complete record of marks obtained by each candidate in all lessons given by him.

(4) The Board of Practical Examiners shall consist of two external examiners and the Principal of the college concerned.

6. *Special Paper*: Methods of teaching special subject—Questions on this paper will be designed to test the candidate's ability to teach that subject and may include test of the subject-matter as well.

The paper will consist of 100 marks and the qualifying marks in this paper shall be 40 per cent, and the record of the candidate's sessional work will be submitted to the examiner and taken into consideration by him at the time of determining his award.

Note.—Candidates offering special paper will be required to give one of their lessons on their special subject and must secure at least second division marks in order to qualify.

SYLLABUS

Paper I.—Principles and Psychology of Education.

SECTION A.

1. Critical examination of the following aims of education: Learning, Morality, Culture, Individuality, Citizenship. What should be the

aim of education in India in the light of the special features of the Indian situation ?

2. Agencies of Education :

(a) Formal : The School.

(b) Informal : The Home, the Community, Religion, the State.

SECTION B.

1. Psychology and its bearing on Education : Modern methods of psychological study as applied to Education—introspection, observation, experiment and psycho-analysis.

2. Heredity and environment as factors in education.

3. The psychology of instincts and emotions : sublimation ; bearing of the psychology of instincts on intellectual and moral education.

4. General innate tendencies suggestion, imitation, sympathy and play, their educational uses.

5. Psychology of character :

I. Innate bases of character :

(a) Disposition, methods of balancing it.

(b) Temperament, and its modification.

(c) Temper.

II. Acquired elements of character.

III. Principles and methods of Moral Education.

6. Psychology of the Unconscious and its educational implications.

7. Attention and interest : Causes of inattention : methods of arousing interest.

8. Psychology of Cognition. Sensation and Sense Training ; perception and the training of observation ; imagination and reasoning—their educational uses and training.

9. Memory, and its effective use in education.

10. Learning and its laws ; fatigue ; transfer of training.

11. Stages of development, educational implications of the psychology of adolescence.

12. Intelligence—Spearman's Two-Factor Theory ; Measurement of intelligence Methods of dealing with the backward child ; Achievement Tests and Tests of emotion and character.

Paper II.—School Organization and Hygiene.

1. *School site, plans and equipment for different types of schools.*—School site ; principles governing the construction of school buildings ; types of school buildings, equipment and furniture suited to each type ;

use of the hall; rooms for special subjects, especially for science, drawing, geography, etc.; types of schools; large, small, urban, small town, large town, boys' and girls'.

2. *Local Educational System.*—The educational system of Ajmer-Merwara; classes and grades of schools for general education—curricula and aims.

3. *Staff.*—The headmaster and the school staff; distribution of work; subject and class teachers.

4. *Time-tables.*—Arrangement and balance of subjects; variations to suit special needs.

5. *Classification and Promotion.*—Classification of scholars; methods of testing progress in various subjects and at different times; class records and promotion; conduct of examinations.

6. *Discipline and methods of dealing with children of different types and age-ranges.*—Discipline, true and false; rewards and punishments; methods of dealing with children of different age-ranges and of special types, e.g. wilful, quick tempered, lazy, sulky, hypersensitive, etc.

7. *Hostels.*—Hostels; physical and moral health therein; superintendence special problems connected with girls' hostels.

8. *Health Education.*—Principles of health education; instruction in hygiene; first aid and laws of health; physical exercises and games for boys and girls; different kinds of organised games and their organisation; use and abuse of tournaments and other forms of competition; playgrounds; formal physical exercises; principles underlying them and their conduct and supervision in school hours.

9. *Extra-curricular activities.*—The organisation and value of extra-curricular activities; systems of pupil self-government; co-operative clubs; the Boy Scout movement and other means of developing corporate life and habits of social service.

10. *Libraries and Museums.*

11. *Parental Co-operation.*—Co-operation between the school, the home and the community; methods of securing parental co-operation; parent-teacher associations; Old Boys' Days; social service and extension of school facilities to the community.

12. *The School Office.*—Equipment, staffing and records.

13. *School Inspection.*—Inspection including common defects in inspection.

Hygiene

Health and physique of children as affecting and affected by education and school conditions. Factors influencing health and growth; direct and indirect means of cultivating good physical habits in schools, e.g. posture in writing and oral lessons. The hygiene of the school,

the classroom and its surroundings; over-crowding of rooms; lighting; ventilation; water-supply; sanitation of the hostel. Simple accidents; First Aid. Junior Red Cross. Objects and Methods of Medical Inspection.

A general acquaintance with the structure and functions of the following systems; skeletal, digestive, circulatory, respiratory and excretory. Defects of eye-sight and of hearing. Personal cleanliness (e.g. cleanliness of hair, nail, teeth, skin, nose and throat). Causes of fatigue and the importance of rest. Common minor ailments, their identification and treatment. The problem of mal-nutrition and diet. Infectious diseases (including leprosy and tuberculosis). Disinfection.

Paper III.—Method of Teaching.

PART I

Subjects of the curriculum and reasons for their inclusion; their relative importance at different periods of school life; correlation of subjects; variation in curricula to meet the needs of various types of schools, and scholars of different ages—the Primary, Middle, High and Intermediate stages; transition.

Methods of teaching in general; inductive and deductive methods; heuristic method. The collective lesson; individual teaching; teaching in sections; group work, and individual work; Exposition and explanation; questioning and answering; dealing with answers; methods of dealing with mistakes, oral, written, or construction, etc. Narration and description; illustrations and illustrative aids; use of the blackboard; diagrams. Relation between the scholar's own work and that of the teacher; encouragement of private study and individual work by the pupil; differences in methods according to the stage of the pupil. Recent developments in methods; Montessori; Dalton Plan; Play way; Project method, etc.

Schemes of work—their preparation and methods of working out; single lessons and series of lessons; notes—full and working notes; revision methods and values.

PART II

Methods of teaching the various subjects of the curriculum of Secondary Schools in India. Provision and use of apparatus.

(i) English—Early training in speech. Phonetics and its use, direct method, Basic English. Reading at various stages; rapid reading; silent and oral reading; text work. Consideration of the subject taught as a "foreign" language. Dictation, transcription and composition—oral and written. The teaching of writing. Correction of work. Literature—its place; appreciation. The teaching of prose and poetry in the three stages. Grammar; Translation; the place of the mother tongue in teaching English.

(ii) History—Why History should be taught in a school; work at different stages and selection of materials for each stage; essentials of teachers' and pupils' work, making the Past real through proper emphasis on movements. History room. The teaching of civics. Modern Developments and the teaching of History in school.

(iii) Geography—The modern conception of Geography; the place of Geography in the school curriculum; different stages and work at each stage; story and regional methods; the place of pictures, models, sketches and other material aids; correlation of Geography with other subjects, specially with Nature Study and hand work. The Home Region; geographical excursions; use of maps.

(iv) Mathematics—Methods and apparatus; the teaching of principles; application of principles; practical, oral and written work; correction of work; means of securing accuracy.

(v) Science—Place of investigation and of information; indoor and outdoor work; books and their use; biography; selection of material for schools differently situated; connection with gardening; excursions.

(vi) A Modern Indian Language—Means of securing accurate hearing and clear articulation through phonetics and drill; the use of stories; oral and written composition; reading aloud, silent reading; recitation; training in the use of books, texts and more detailed study; grammar and its place; rapid reading; cultivation through prose and poetry of a taste for literature; place of memorization in literature teaching; aids to teaching. The teaching of calligraphy and prosody.

Paper IV.—History of Education.

A. *Western Education*

The influence of the following educators on modern educational thought and practice: Rousseau, Pestalozzi, Froebel, Herbart, Spencer, and Dewey.

B. *Indian Education*

A general review of Education in India from the beginning of the nineteenth century to the present day with reference to the following:—

The Orientalist Policy upto 1835.

Orientalist *v.* Anglicist Controversy, 1835.

The Despatch of 1854.

Educational Development from 1854 to 1882.

The Commission of 1882 and its results.

The Founding of the universities and their influence on Secondary Education.

University Reforms, 1904-06.

Beginning of Compulsory Primary Education and subsequent developments in Primary Education.

The Calcutta University Commission and its main recommendations about Secondary and University Education.

The Indian Statutory Commission.

Interim Report, 1929.

Abbott and Wood Reports.

Experiments in National Education.

Present Developments and Trends—Education of Women, Adult Education, Basic Education, etc.

Paper V.—Special.

Method courses in English; History; Geography; Mathematics; Physics and Chemistry; General Science; Anatomy, Physiology and Hygiene; and Urdu and Hindi.

(Detailed syllabuses are omitted here.)

Special Courses

These include—

(i) Special course in Gardening and Nature Study;

(ii) Rural education;

(iii) Physical education;

(iv) Educational Hand-work; and

(v) Domestic Science.

(Detailed syllabuses are omitted here.)

THE DIPLOMA IN EDUCATION

8. *Patna University*: The Patna University provides for a Diploma in Education. Its ordinances and regulations are given below:—

The course of study shall extend over one academical year and comprise the following subjects:—(i) History of Educational Practices; (ii) Principles of Education; (iii) Methods of Teaching; (iv) Hygiene of the School child; (v) Practical Teaching.

The course of practical training shall comprise of demonstration, criticism, and practice teaching lessons; also instruction in clear speaking, a good reading, and the use of teaching apparatus.

In the theoretical portion of the examinations, there shall be one paper of three hours carrying 100 marks in each of the subjects (i), (ii), (iii) and (iv).

The practical examination for testing skill in secondary teaching shall be held at a recognised school in Patna and such other places as the Syndicate may determine. Each candidate shall prepare (*a*) schemes of work extending over one term in three subjects selected by him from the curriculum of a recognized secondary school; (*b*) full notes of a lesson included in the scheme in each of the subjects selected.

The candidate shall be required to deliver all the three lessons, 400 marks shall be allotted to this portion of the examination of which 100 shall be for skill in the use of teaching apparatus and 100 for correct pronunciation and clear enunciation.

The practical examination for testing skill in primary teaching shall be held at a primary school in Patna or such other places as the Syndicate may determine. Each candidate shall prepare (*a*) a scheme of work extending over one school term of three months in each subject of the primary school curriculum; (*b*) full notes of one of the lessons in each subject included in each scheme of work. Two of the notes of lessons shall illustrate the handling of two different classes in two different subjects during one teaching period. The candidate shall be required to teach one or more lessons and the teaching shall be through the medium of a modern Indian language. The allotment of marks shall be as in the preceding paragraph.

The following syllabuses are prescribed :—

SECONDARY EDUCATION COURSE.

Paper I.—History of Educational Practice.

Part I. A short history of Indian Education.

The evolution of British educational policy in India; official documents on the subject.

The present state of primary and secondary education in India and specially in the province of Bihar (for both boys and girls); their defects, suggested reform.

A very brief survey of other fields of Indian education—University, Technical, Oriental, Vocational—at the present time.

Part II. A short history of Western educational thought and practice, dealing particularly with Locke, Rousseau, Pestalozzi, Herbart, Froebel, Montessori, Spencer, Dewey.

A brief account of the national system of education in England and the United States of America.

Paper II.—Principles of Education.

Relation between principle and practice; psychology and education; fundamental aims and concepts; horme and mneme; stimulus and response; modes of consciousness; the unconscious; the subconscious;

mental conflict; repression; sublimation; instinct; heredity; habit; play; imitation and suggestion; group psychology; the thinking process; attention and interest; memory; volition; moral training; emotion and sentiment; mental tests; individual differences, a broad view of mental development in the individual and the race; the educative process as a whole.

Place and importance of adolescence: pre-adolescence; physical, mental, moral and social characteristics of adolescence, educational applications in the school and outside; special bearing upon curricula and methods of teaching.

Paper III.—Methods of Teaching the following subjects.

(*a*) Modern Indian Languages—Hindi, Bengali or Urdu.

(*b*) English.

(*c*) History.

(*d*) Geography.

(*e*) Science.

(*f*) Mathematics.

Paper IV—Hygiene of the School Child.

The human body, how it works; the skeleton and muscles. The circulatory, respiratory, digestive and nervous systems. The senses and the sense organs.

The relation of education to hygiene. The general laws and factors influencing growth. Physiological, anatomical and mental ages. The hygiene of posture for school children. Malnutrition—its causes and effects. Hygiene of mouth and nose. Defects of vision and audition. Preventive mental hygiene and education of the nervous child. Speech defects and hygiene of the voice. Rest and sleep.

Disease caused by parasites; malaria, kala azar, filariasis, intestinal worms, small-pox, chicken-pox, measles, whooping-cough, mumps, cholera, plague, typhoid, diarrhoea and dysentery. Lung diseases, skin diseases, venereal diseases. Disinfection of houses in cases of contagious diseases.

Air and ventilation. Water and water-borne diseases. Purification, supply and storage of water. Food, its composition, quantity and cooking. Cleanliness and personal hygiene. Clothing. Sex hygiene.

Climate in relation to health, temperature, humidity, sunshine and winds.

Sanitary location of school building and hostels. Village sanitation.

Primary Education Course.

Paper I.—History of Educational Practice.

A short History of Indian Education.

The evolution of British educational policy in India. The present state of Primary education in India, particularly in Bihar; its defects; suggested reforms. Modern experiments in rural education in India. History of educational thought abroad—Rousseau, Pestalozzi, Froebel, Montessori, Dewey. A brief account of systems of elementary education in any two other countries.

The countries of which the system of elementary education is to be studied for 1949-50 are Canada and Russia.

Paper II.—Principles of Education.

Relation between principle and practice; psychology and education; fundamental aims and concepts; horme and mneme; modes of consciousness; the unconscious; mental conflict; repression; sublimation; instincts; heredity; habit; play; imitation and suggestion; group psychology; the thinking process, attention and interest; memory; volition; moral training; emotion and sentiment; mental tests; individual difference; a broad view of mental development in the individual and the race; the educative process as a whole.

Methods of child study; mental and physical development upto five and from five to ten; special technique for children of different types and ages and for different subjects.

Paper III.—Methods of Teaching and Primary School Organization.

Organization, administration and inspection of primary schools.

Methods of teaching all subjects of the primary school curriculum.

Paper IV.—Same as in the Secondary Education Course.

Paper V.—Practical Teaching.

THE B.T. DEGREE

9. *Agra University* The Agra University confers a B.T. degree. Its ordinances and regulations on the subject are the same as those given above under Rajputana University.

10. *Baroda University* The ordinances and regulations of this university are the same as those of the Bombay University given in the next paragraph.

11. *Bombay University*: The ordinances and regulations of this university are given below :—

1. A candidate for the Degree of Bachelor of Teaching (B.T.) must have :—

(i) kept two terms (the first and the second) of lectures on the Theory and Practice of Education in a Training College affiliated to the University for the purpose of the B.T. Degree, and

(ii) completed a course of practical work, extending over one school year to the satisfaction of the Head of the Institution in which the candidate is studying, consisting of :—

(*a*) Attendance at Demonstration and Discussion Lessons;

(*b*) Observation of Teaching as directed;

(*c*) Teaching Practice of not less than 30 lessons distributed over different standards V to X of a recognised school or a school selected by the Principal;

(*d*) Attendance at Tutorials for the discussion of Practical Teaching; and

(*e*) Practical experience of Educational Psychology and Experimental Education. The examination for the Degree of B.T. shall be—

Part I.—Written Examination.

Part II.—Practical Examination.

The examination for Part I may be taken after two terms' attendance at a Training College. Candidates will not be permitted to appear for Part II unless they produce a satisfactory certificate that they have served as full-time teachers for 100 working days before the 31st day of January on the staff of a school or schools recognized or approved by the Syndicate, prior or subsequent to their keeping two terms' attendance in a Training College.

PART I

In Part I, candidates will be examined in the following subjects :—

1. *Theory of Education*—Psychological.

(i) Educational Psychology.

(ii) Experimental Psychology and Statistical Methods.

2. *Theory of Education*—Philosophical.
   - (i) Principles of Education.
   - (ii) General Method.
3. *Practice of Education* (Special Methods).

   Method in any *two* of the following:—
   - (i) Method in English.
   - (ii) Method in Modern Indian Languages.
   - (iii) Method in Sanskrit.
   - (iv) Method in Persian.
   - (v) Method in French.
   - (vi) Method in History.
   - (vii) Method in Geography.
   - (viii) Method in Mathematics.
   - (ix) Method in Science.
4. *Educational Administration.*
   - (i) School Organization and Management.
   - (ii) School Hygiene and Educational Administration.
5. *History of Education.* (One paper of 100 marks).
   - (i) Outline of history of Indian Education.
   - (ii) Indian Education and its Problems.

Each subject will have one paper of three hours and one hundred marks.

The following are the syllabuses for the various papers:—

PAPER I

THEORY OF EDUCATION—PSYCHOLOGICAL

Section I.—*Educational Psychology*:

1. Psychology and its bearing on education. The old (subjective) and the new (objective) methods of psychological study.
2. The viewpoint of hormic psychology. The powers of the mind, horme, mneme, the principle of cohesion.
3. Instincts: McDougall's theory of relation between instinct and emotion and Drever's views; sublimation of some instincts of special importance in schools.
4. General innate tendencies; sympathy; imitation and suggestion; play and play-way in education.
5. Products of development; habits, complexes, sentiments and character. The will.

6. Stages of child-development. Adolescence.
7. The psychology of the unconscious and its bearing on education.
8. Mental Hygiene: Difficulties in development—behaviour problems —juvenile delinquency—child guidance.
9. Doctrine of Formal Discipline or Transfer of Training.
10. Psychology of attention and interest and its bearing on education.
11. Memory and its training. Remembering and forgetting.
12. Sensation and perception, image and imagination. Perceptual learning and conceptual thinking. Reasoning.
13. Individual differences: their implications for school work.
14. Intelligence and its nature.
15. The psychology of the group.

Section II.—*Experimental Psychology and Statistical Methods*:

1. Mental Tests.
2. Types of Mental Tests.
3. Technique of Mental Testing.
4. Measurement of Intelligence.
5. Types of Intelligence Tests.
6. Results and uses of Intelligence Testing.
7. Vocational Guidance.
8. Statistical Methods applied to education.
9. Collection and tabulation of educational facts.
10. Measures of Central Tendency.
11. Measures of Variability.
12. Frequency Curves and Normal Probability Curve.
13. Principles of Correlation. (Spearman's methods of calculating the co-efficient of correlation.)

Note:—With regard to items 8 to 13 above, stress should be laid on statistical methods; students should be required to work out only easy examples involving the methods.

Practical work:—Simple experiments on Intelligence, Association, Memory, Attention, Perception, Imagery, Imagination, Reasoning, Learning, Fatigue, Suggestion, Perseveration.

Paper II

Theory of Education—Philosophical

Section I.—*Principles of Education*:

1. (*a*) The meaning and philosophy of Education; (*b*) Education as a Science; Contribution of Psychology, Sociology and Biology to education.

2. Aims of Education; Social and Individual Aims; the meaning of Individuality; the Education of the whole man; Formation of Character; Education and Culture; Education and Adjustment.
3. The Educational Outlook; school, society and the individual. Education as related to nationalism and internationalism.
4. Different Aspects of Education; Education for leisure; Education for vocation; Education for Citizenship; Education for emotional adjustments.
5. Data of Education; The Educand—the nature of the educand—the influence of environment; Heredity and Environment.
6. Principles of learning; Laws of Learning.
7. The Teacher; The teacher's place in Education; Qualifications and personality of the teacher; Child-centric Education and the teacher as the guide overseer, and superintendent.
8. The Curriculum; Principles of Curriculum Construction; Correlation of studies; Curriculum and the pupil; Curriculum and extra curricular activities.

Section II.—*General Method*:

1. Foundations of Method—Maxims of Method: lesson-planning and notes of lessons.
2. Types of Lessons—determined by aim; Inductive; Deductive; Drill; Review; Appreciation; Discussion; Laboratory; Demonstration; Criticism.
3. Devices of Teaching—Assignment; Questioning; Exposition; Illustrations (verbal and concrete); Black-Board; Text-books; Home-work.
4. Devices of Testing—Tests, Marking, Examinations (essay type, new type), Promotions.
5. Class—Class *v.* Individual Teaching; Securing and maintaining attention; Teacher—his demeanour, voice and movements; How to study; Correlation of studies; Lesson-units; Discipline in class-room.
6. Modern Developments—Montessori & Kindergarten Methods; Project Method; Dalton Plan and Supervised study.

PAPER III

Practice of Education (Special Methods).

(1) English.

(2) Modern Indian Languages.

(Marathi, Gujarati, Kannada, Sindhi & Urdu).

(3) Sanskrit.

(4) Persian.
(5) French.
(6) History.
(7) Geography.
(8) Mathematics.
(9) Science.

(Detailed syllabuses are omitted here).

PAPER IV

Educational Administration

Section I.—*School Organization & Management.*

1. Introductory: The importance and scope of School Organization, Management and Hygiene.

2. Social Aspect of School Life: (*a*) The social life of the school and its nature. (*b*) Organization and government of social life in school. (*c*) School Discipline. (*d*) Extra-curricular activities. (*e*) Civic and Moral instruction. (*f*) Religious instruction. (*g*) Sex education. (*h*) Rewards and Punishments.

3. Academic Aspect of School Life: (*a*) Admission, classification and promotion of pupils. (*b*) Teachers and classes: Subject teacher and Class teacher; rotation of teachers. (*c*) Curriculum. (*d*) Time-table. (*e*) Home-work. (*f*) Examinations. (*g*) Co-education.

4. General: The Headmaster and his assistants; parental co-operation. School inspection. School records.

Section II.—*School Hygiene and Educational Administration.*

(A) School Hygiene:

1. The aim, objects and scope of Health instruction.

2. Physical Education.

3. Healthful school conditions: The site of the school—the school building—the class-room lighting, ventilation, sanitation and water supply; drinking water; washing and lavatory arrangements; School equipment—the problem of postures; the Boarding houses; the play-ground.

4. Health service and supervision: Medical inspection—school clinics—care of skin, eyes, ears and teeth—signs and symptoms of infectious and contagious diseases peculiar to India—fatigue, mental and physical—mal-nutrition and its evil effects.

(B) Educational Administration:

1. Controlling Authorities—The Education Department—Central and Provincial; University; Local Authorities; Private Agencies—their functions and relations with one another.
2. The Administration of Higher, Secondary and Primary Education; Adult education; Special Schools and Vocational Schools.
3. Training of Teachers.

Note:—The above topics should be treated with special reference to the Bombay Province.

PAPER V

History of Education

Section I.—*Outline of History of Indian Education*:

1. Ancient India:

   Brahmanic and Buddhistic Education—their aims, ideals, features and institutions.

2. Muslim Period:

   Main features of the educational system and its contribution to Indian Education.

3. British Period: (upto 1900 A.D.)

   Indigenous education in India at the beginning of the 18th Century—Enquiries by Munro, Elphinstone and Adam.

   Early activities of the Missionaries and the East India Company.

   Warren Hastings, Charles Grant, Minto.

   Charter Act of 1813.

   Elphinstone, Raja Ram Mohan Roy. Charter Act of 1833.

   The Classisist and Anglicist Controversy: Macaulay, Bentinck's Orders, 1835.

   Auckland.

   Board of Education in Bombay and the Bombay Controversy regarding the medium of instruction.

   The Thomason plan.

   Wood's Despatch of 1854.

   Establishment of Indian Universities.

   The Queen's Proclamation.

   Despatch of 1859.

   Indian Education Commission, 1882.

Section II.—*British Period from 1900 A.D. onwards*:

Curzonian period; The Indian Universities Committee's Report (1902) and Act (1904).

G. R. on Educational Policy, 1904.

G. K. Gokhale and his efforts in the cause of Compulsory Primary Education.

G. R. on Indian Educational Policy of 1913.

Patel's Primary Education Act of 1918 in Bombay.

The Calcutta University Commission.

Government of India Act of 1919.

The Hartog Committee.

Government of India Act of 1935.

Indian Education and its Problems.

1. Pre-primary education.
2. Compulsory education.
3. Secondary education: (*a*) Alternative courses. (*b*) Medium of instruction. (*c*) Co-education. (*d*) Differentiation of curricula for boys and girls.
4. University Education: (*a*) Need for more Universities. (*b*) Types of University. (*c*) Medium of instruction. (*d*) More facilities for scientific and technological education. (*e*) Facilities for research. (*f*) Finance of University education. (*g*) Inter-University Board and the need for co-ordination among Universities.
5. Examinations.
6. Religious instruction.
7. Industrial and Technical education.
8. Adult education and universal literacy.
9. Training of Teachers.
10. Education of the handicapped.
11. Experiments in Indian Education:
    (*a*) (1) Vishwa Bharati. (2) Indian Women's University. (3) Gurukul. (4) Jamia Millia. (5) Wardha Scheme.
    (*b*) Movements towards "National Education" and their contribution.
12. The Indian student and his part in social welfare work.

The total number of marks for the Part I examination will be 500. In Part II of the examination candidates will be tested in their practical skill in class management and class teaching. Candidates will be required to keep—

(1) A "Diary" of demonstrations attended, lessons observed and teaching practice carried out.

(2) A "Journal" containing notes of lessons given and criticisms made thereon by a Master of Method.

(3) A "Log-book" of experimental work carried out.

The Head of the Institution in which the candidate is studying will be required to keep a record and estimate of all lessons given by students in Practising Schools, and of all experimental work done.

The total number of marks for the Part II examination will be 300.

(1) For practical work done by a candidate during his year's training marks upto a maximum of 100 shall be assigned by the Head of the affiliated College in which he has been studying. Marks so assigned may be revised in the case of candidates who fail to pass the University examination and apply for such revision, provided (*a*) that they put in regular attendance for a period of one month at least at the college from which they appear for the University Examination, (*b*) that during this period they give under the supervision of the College authorities six additional lessons in teaching practice to the satisfaction of the Head of the Institution, and (*c*) that before reappearing for the University examination they carry out a term's work at a school recognized by the University for the purpose of Part II of the B.T. Examination.

(2) For the remaining marks a candidate must submit to a practical test of two full period lessons. The subjects of these lessons will be the two selected by the candidates under Part I, Paper III.

Standard for Passing the Examination To pass the examination in either Part I or Part II, a candidate must obtain not less than 40 per cent of the total number of marks for the said Part.

To pass the whole examination, a candidate must satisfy the Examiners in Parts I and II and obtain not less than 40 per cent of the total marks in each.

Such of the candidates as appear for Parts I and II at the same time and obtain an aggregate of 66 per cent or more in each Part shall be declared to have passed the examination with distinction; those who obtain 60 per cent or more in the aggregate of both the Parts taken together at one and the same examination shall be declared to have passed the examination in the First Class and those who obtain 50 per cent or more in the aggregate of both the Parts taken together at one and the same examination shall be declared to have passed the examination in the Second Class.

12. *Calcutta University* The ordinances and regulations of this university re the B.T. degree are given below:—

1. *Conditions of admission to the Examination*: These are as follows:—

(*a*) Collegiate Students.

A candidate may be admitted to the B.T. Examination, not less than one year after passing the B.A. or B.Sc. Examination, provided he has attended a regular course of studies in a College (or Colleges) affiliated

in teaching and has, in addition, undergone a course of practical training.

(*b*) CANDIDATES WHO HAVE PASSED THE L.T. EXAMINATION.

A candidate, who has passed the examination for the Licentiate in Teaching and has also graduated in Arts or in Science, may be admitted to the examination without being a collegiate student; a Licentiate in Teaching who has served in a recognized school for at least seven years may also be admitted to the examination without being a collegiate student and without passing the B.A. or B.Sc. Examination.

(*c*) CANDIDATES WHO HAVE PASSED THE UNIVERSITY TEACHERS' TRAINING CERTIFICATE EXAMINATION.

Any graduate teacher in a recognised school, who, after passing the University Teachers' Training Certificate Examination, has served as a teacher for at least two years, may appear at the B.T. Examination without being a collegiate student, provided that (*a*) he has graduated with Honours, or (*b*) he has obtained the degree of M.A. or M.Sc. in the first or the second class, or (*c*) he has passed the University Teachers' Training Certificate Examination with Distinction, or (*d*) the school in which he serves is specially approved under section 2-G of the University Regulations, Chapter XL.

Such candidates shall be required to keep a record of at least 40 lessons delivered in their schools after they have passed the University Teachers' Training Certificate Examination, which shall be inspected and taken into consideration at the time of University examination.

2. Every candidate shall be examined in the following subjects:—

(1) Principles of Education, including Educational Psychology (Two Papers.)

(2) History of Education (One Paper.)

(3) General Methods, School Organisation and School Hygiene (One Paper.)

(4) Contents and Methods of Teaching any *three* School Subjects from the following list, Geography being considered as equivalent to two subjects:—(Three Half Papers.)

(i) English.

(ii) A Classical Language.

(iii) A Modern Indian Language: Bengali or Hindi or Urdu or Assamese.

(iv) A Modern European Language: French or German.

(v) History.

(vi) Mathematics.

(vii) Geography.

(viii) Hygiene.

(ix) Music.

(x) Arts and Crafts.

(xi) Physical Sciences (Physics, Chemistry and Astronomy).

(xii) Biological Sciences (Botany, Zoology, Physiology) and Geology.

(xiii) Primary and Infant School Subjects.

(5) Essay and Composition in *one* of the Modern Indian Languages (Bengali or Hindi or Urdu or Assamese), or in English in the case of those whose mother tongue is not one of the above four languages (*One Paper.*)

(6) A candidate may, if he so desires, be also examined in *one* of the following *additional* subjects :—(*One Paper.*)

(i) Mental and Educational Measurements.

(ii) Social and Abnormal Psychology applied to Education.

(iii) Mental Hygiene and Child Guidance.

(iv) Methods and Organisation in Nursery Schools, Kindergarten and Montessori Schools.

(v) Comparative Education with reference to selected countries in Europe and America.

(vi) Education of Handicapped Children with reference to any *one* of the following types :—

(*a*) Deaf and Mute.

(*b*) Visually Handicapped.

(*c*) Otherwise Physically Handicapped.

(*d*) Mentally Retarded.

3. There shall be a Written examination in each of the subjects (1) to (5) and in the additional subject, if any. There shall also be a Practical examination for testing the candidate's skill in teaching, and also his skill in Laboratory work in the case of a candidate who offers Geography or Science.

4. Each Theoretical paper shall be of three hours and shall carry 100 marks. Each half paper shall be of two hours and shall carry 50 marks.

250 marks shall be allotted for the Practical examination as follows :—

(a) *For candidates taking up Science or Geography*—

(i) One lesson to be given to a class (on any *one* of the subjects taken up by the candidate) (100 marks.)

(ii) Practical Examination in Laboratory (100 marks.)

(iii) Lesson Notes, Laboratory Note-books, etc. (50 marks.)

Total (250 marks.)

(b) *For candidates not taking up Science or Geography*—

(i) Two lessons to be given to a class or classes (on any *two* of the subjects taken up by the candidate) (200 marks.)

(ii) Lesson Notes, Tutorial work, etc. (50 marks.)

Total (250 marks.)

5. Each student shall give a number of lessons, in the subjects taken by him in selected schools under supervision. The number of lessons may be decided by the Principals of the colleges, but shall, in no case, be less than 30.

6. The practical test in teaching shall consist of a lesson or lessons to be given by each candidate to a class or classes at some recognised school.

Candidates will be required to prepare, for presentation to the examiners, at least a week before the examination, full teaching notes of three lessons, i.e. one lesson for each of the subjects taken up. The notes should indicate (*a*) the age of the pupils for whom the lesson is intended, (*b*) the previous knowledge which they are assumed to possess, and (*c*) the diagrams, maps, apparatus and other illustrations which it is proposed to use.

The examiners shall decide which of the lessons prepared by the candidate shall be given.

The examiners may require a candidate to give an extra lesson if, in their judgment, such a lesson is necessary.

7. A candidate may present himself for the Theoretical and Practical portions of the examination separately, provided that the interval between the two does not exceed two years. If the interval exceeds two years, both the Theoretical and the Practical portions of the examination shall be taken together.

8. In order to pass, a candidate must obtain 40 per cent of the marks in each of the Compulsory subjects and 40 per cent of the marks in the Practical examination.

If a candidate has passed in the Compulsory subjects and in the Practical examination, the marks in excess of 40 obtained by him in the additional subject, if any, shall be added to his aggregate, and the aggregate so obtained shall determine his class and his place in the list.

Candidates obtaining at least 540 marks shall be declared to have obtained a First Class and those obtaining 360 marks shall be declared to have obtained a Second Class.

SYLLABUS

Principles of Education, including Educational Psychology

Paper I

Concept of education. Educational aims from the point of view of the individual and of society.

Influences of heredity and environment on the mental development of children.

Development of the school idea. Main types of schools and their distinctive functions.

The teacher and his functions.

The curriculum and the principles of curriculum construction.

Mental characteristics of human beings and their development. Chief stages in general development.

A brief review of modern trends in educational theory and practice.

Paper II

Physical basis of mental life.

The general bearing of psychology upon the theoretical and practical problems of education.

The psychology of individual differences. Intelligence, its nature, measurement and distribution. Instinct. Emotion. Temperament and character. Perception. Memory. Imagination.

The psychology of the learning process. Acquisition of skill, knowledge and taste. Formation of habits.

Nature and growth of mental functions involved in the learning process. Interest and Attention. Laws of learning.

Measurement of learning. Examination. Scholastic tests.

Development of emotions and sentiments. Basis of character training.

Psychology of the adolescent.

Educational bearing of the psychology of the unconscious.

Discipline.

Psychology of teaching methods and school subjects.

History of Education

A brief review of the Hindu, Buddhistic and Islamic systems of education in India.

Contributions of Rousseau, Pestalozzi, Froebel, Herbart, Montessori and Dewey to modern educational thought.

A general survey of the development of elementary, secondary and higher education in Great Britain from 1830 to the present day.

Early beginnings of Western education in India. Macaulay's Minute.

Development of Western education in India. Important educational despatches.

Promotion of education through local self-governing bodies. Primary Eduation Acts in India. An outline survey of the development of elementary education in India.

Present position of secondary education (with special reference to Bengal and Assam).

Indian Universities' Act and the growth of Indian Universities. Calcutta University Commission. Later development of the Universities, with special reference to Calcutta University. Its organisation, administration and problems.

Development of women's education in India.

A brief review of the national education movement and educational experiments in India.

General Methods, School Organisation and School Hygiene

School building and equipment. The laboratory and the library.

The teacher ; his academic and professional preparation. Selection of teachers.

General organisation. The curriculum and the time-table. Class-room administration. Supervision.

Methods of individualised instruction. Project method.

The technique of instruction. Planning a lesson.

Exposition and illustrations in teaching. Teaching aids and appliances. Visual instruction. Correlation of studies.

Self-government in schools. Training in citizenship.

Extra-curricular activities. Games and recreation.

Examinations and tests. Pupil progress and promotion. Measurement of teaching efficiency.

Health of school children. Personal and school hygiene. Medical inspection.

School sanitation.

Conditions of healthy physical life and development of children at home and at school. Tiffin in schools.

Functions and responsibilities of teachers, with reference to health and disease.

Contents and Methods of Teaching School Subjects

Detailed study of the contents and methods of teaching *three* of the following subjects, with special reference to high schools (*three* subjects are to be selected, Geography being considered as equivalent to *two* subjects):—

(i) English, (ii) A Classical Language, (iii) A Major Modern Indian Language (Bengali or Hindi or Urdu or Assamese), (iv) A Modern European Language (French or German), (v) History, (vi) Mathematics (vii) Geography, (viii) Hygiene, (ix) Music, (x) Arts and Crafts, (xi)

Physical Sciences (Physics, Chemistry and Astronomy), (xii) Biological Sciences (Botany, Zoology, Physiology) and Geology, and (xiii) Primary and Infant School Subjects.

(The detailed syllabuses are omitted here.)

Essay and Composition

Essay and Composition in one of the Modern Indian Languages (Bengali or Hindi or Urdu or Assamese), or in English in the case of those whose mother tongue is not one of the above four languages.

Additional Paper *

(OPTIONAL)

(i) Mental and Educational Measurements.

(ii) Social and Abnormal Psychology applied to Education.

(iii) Mental Hygiene and Child Guidance.

(iv) Methods and Organisation in Nursery Schools, Kindergarten and Montessori Schools.

(v) Comparative Education with reference to selected countries in Europe and America.

(vi) Education of Handicapped Children with reference to any *one* of the following types: —

(*a*) Deaf and Mute.

(*b*) Visually Handicapped.

(*c*) Otherwise Physically Handicapped.

(*d*) Mentally Retarded.

13. *Delhi University*: The ordinances and regulations of the Delhi University regarding the B.T. degree are given below: —

1. Every candidate seeking admission to the examination for the degree of Bachelor of Teaching shall satisfy the following conditions: —

(*a*) He must have passed at least the B.A. or B.Sc. Examination of the University of Delhi or an examination recognised as equivalent thereto.

(*b*) He must after passing that examination have pursued a regular course of study as hereinafter prescribed for not less than one academic year in the University or a recognised institution.

2. No candidate shall be considered to have pursued a regular course of study unless he has attended at least three-fourths of the full number

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* The detailed syllabuses are omitted here.

of lectures delivered during one academic year at a recognised institution and done at least fifty lessons of practical training in teaching in an approved school.

3. The course of study and examination shall comprise the following : —

Part A : Theory.

PAPER I.—Principles and Practice of Education including School Organization.

PAPER II.—Psychology and Hygiene of the School Child.

PAPER III.—Present Educational System in India and Experiments Abroad.

PAPER IV.—Methods of Teaching Selected School Subjects. (Two to be taken.)

PAPER V.—Any *one* of the following : —

(*a*) Social Education ;

(*b*) Educational Psychology (Special Course);

(*c*) Physical Education ;

(*d*) School Administration ;

(*e*) Early Childhood Education ;

(*f*) History of Education in India ;

(*g*) Audio-Visual Education.

Part B : Practice.

I.—Practical Skill in Teaching.

II.—Sessional Practical Work.

4. There shall be a written examination for the Papers I, II, III, IV and V under Theory.

5. The duration of each paper under Part A shall be 3 hours, and of each examination lesson under Part B, 40 minutes.

6. For examination in practical skill in teaching under Part B, every candidate shall be required to give two lessons, one in each of the subjects offered by him for Paper IV under Theory, in the presence of examiners appointed for the purpose. The examiners may require the production of the candidate's notebook or record of teaching done and lessons observed. In determining the proficiency of the candidate in teaching, the examiners shall also take account of the report by the authorities of his institution upon his teaching work during his course of training.

6A. The distribution of marks will be as under : —

Part A : Theory.

PAPER I.—100 marks.

PAPER II.—100 marks.

PAPER III.—100 marks divided as follows:

(*a*) Present educational system in India (60 marks.)

(*b*) Educational experiments abroad (40 marks.)

PAPER IV.—100 marks for two school subjects (50 for each).

PAPER V.—100 marks.

Part B : Practice.

I.	Practical Teaching		200
	Two examination lessons	100	
	Lessons given during the session	100	
II.	Sessional practical work in connection with art and crafts, psychology and tutorial work		100
	Art and craft work	30	
	Psychology practical	30	
	Tutorial work	40	

7. The minimum number of marks required to pass the examination shall be thirty-five per cent in each paper and forty per cent on the aggregate in Part A (Theory) and forty-five per cent in Part B (Practice).

Those who obtain sixty per cent of the aggregate marks or more in Theory and Practice combined will be declared to have passed with distinction provided that no student who does not pass the entire examination at one time shall be declared to have passed with distinction.

8. Any candidate who has obtained not less than forty per cent of the aggregate marks, but has failed in one subject only under Part A or in Part B, of the examination, obtaining not less than twenty-five per cent in that subject under Part A or in Part B, as the case may be, may be admitted to a supplementary examination in that subject under Part A or in Part B, in that year. But no candidate shall be permitted to take the supplementary examination more than once.

9. A candidate who fails to pass Part A of the examination or Parts A and B (provided that he has obtained not less than forty-five per cent marks in the practical work during the year) may, subject to the Ordinance, be admitted to a subsequent examination.

9A. A candidate who undergoes training in both Parts A and B in accordance with the provisions laid down in the Ordinance, but fails to pass or for good reasons fails to appear, may be admitted to a subsequent examination to be held at such time as may be determined by the

Executive Council, as an ex-student or, if he so desires, on being re-admitted to a college.

10. The B.T. Examination (Theory) under Part A will be ordinarily held in April. The supplementary examination will be held in September every year.

SYLLABUS

Paper I.

Principles and Practice of Education including School Organization.

Meaning of education. Educational aims. Agencies in education: family, school, society, state and others. Religion and education. School as a society. Freedom and discipline in education: self-government in schools. The main types of schools and their distinctive functions. Curriculum. Classroom techniques. Extra-curricular activities. School relationships: pupil-teacher-parent: teacher-society. The school set-up: buildings and equipment, time-tables, school records, examinations, libraries, health facilities.

Paper II.

Psychology and Hygiene of the School Child.

1. The scope of educational psychology. The organism and environment. Inherited and acquired characteristics. The mental and social development of the school child. Individual differences. Intelligence and its measurement. Reasoning and imagination. Personality and character development Group behaviour. Mental hygiene. Special problems of adolescence. Learning: factors involved in the teaching-learning process. The problem of backwardness. Standardised tests. Elementary educational statistics.

2. Functions and responsibilities of teachers with reference to health and disease. Personal and social aspects of health education. Physical development of the school child. Common physical defects. Conditions of healthy physical life in the school. Nutrition. School meals. Recreation. Safety education. School medical service.

Paper III.

Present Educational System in India and Experiments Abroad.

India :

Important features of the present educational system in India. The influences that have mainly determined the form of the present system. The organizational set-up at various levels, with a study of their main problems. Some recent developments and experiments.

Experiments Abroad :

The child-centred school, the activity and project methods, the integrated curriculum. The movement for individualising instruction. The guidance movement: child guidance, educational and vocational guidance.

PAPER IV.

Methods of Teaching School Subjects (two to be taken).

(*a*) Mother tongue.

(*b*) English.

(*c*) Mathematics.

(*d*) Science.

(*e*) History.

(*f*) Geography.

(*g*) Civics.

(*h*) Economics.

PAPER V. (Any one of the following.)

(a) *Social Education* :

Nature and scope of social education. Functions of social education. Its status in a national programme. Psychology of adult learning. The adult and his mental and emotional traits. The family and social set-up in India as background to learning. Motivation and process of learning—participation, retention and application. Types of adult education: experiments in some foreign countries, especially Denmark, Sweden, U.S.A., U.K., China. Brief survey of adult education movement in India. Methods and organization of social education.

(b) *Educational Psychology* : (*Special course.*)

The bases of learning. Experience and learning. Principles of learning. Development of motor and mental learning. Problems of permanence, transference and interference. Factors influencing learning. Individual differences and their measurement. Motivation, attention and interest. Improvement of work habits of pupils. Evaluation of achievement. The problem of backwardness: causes, diagnosis and treatment. Remedial instruction in one of the following areas of learning: reading, spelling, composition and arithmetic.

(c) *Physical Education* :

Modern principles, aims and objectives of physical education. A general survey of the past and present trends in physical education. Rudimentary knowledge of human mechanism. Organization and administration of health education. Health examination, first aid and

home nursing. Athletics and sports. Play and play activities for different age-groups. Their organization. Equipment and facilities. Scouting.

(d) *School Administration*:

Supervision: its meaning, principles and means. Organisational set-up. The principal as a supervisor. Planning for supervision. Democratic approach. Technique of supervision and classroom observation. Measurement of progress and its recording. Staff meetings. Teachers' councils. Evaluation of supervision.

(e) *Early Childhood Education*:

Psychology of early childhood; general objectives in early childhood education. The role of the home in early childhood education. The pre-school curriculum. Organisational set-up. Methods and approach. Work schedule. Progress records and reports. Observations, tests and measurements. Building and equipment. Practices in early childhood education: kindergarten, Montessori and nursery schools.

(f) *History of Education in India*:

Special features of the ancient Indian system of education. Nalanda and its organisation of education. Education in medieval India; pre-Mughal and Mughal periods. Beginning of western education in India. Educational landmarks in the British period. Post-war educational problems. Education in Free India.

(g) *Audio-Visual Education*:

Communication in the modern world. Significance of audio-visual communication in society. Psychological basis of learning through audio-visual aids. Audio-visual teaching materials: various types, their preparation, use and limitations. General principles underlying their effective use. Audio-visual methods applied to classroom teaching. Integration with school curriculum. Follow-up work and evaluation.

14. *Karnatak University* This University confers the B.T. degree. Its ordinances and regulations are the same as those given above under the Bombay University.

15. *Madras University*: The ordinances and regulations of this university which now confers the B.T. degree (it used to be called L.T. in the past) are given below:—

Course of Study:

1. The Course of Study, which shall last for one academic year, shall include:—

A.—Theory of Education and School Organisation.

B.—Educational Psychology and Sociology.

C.—Methods of Teaching and Learning—General.

D.—Methods of Teaching and Learning appropriate to not less than *two* and not more than *three* of the following subjects :—

(i) Indian Languages.

(ii) Classical Languages.

(iii) English.

(iv) Mathematics.

(v) Science.

(vi) Home Science.

(vii) Social Studies.

(viii) Basic Education.

(ix) Music.

(x) Arts and Crafts.

(xi) Technical Subjects (Agriculture, Commerce, Engineering, etc.).

E.—Health Education, Citizenship Training and Physical Education.

F.—*Practical Training* :—

(i) Teaching Practice (including Practice Lessons, Observation and School Visits).

(ii) Practical working and maintenance of Audio-Visual Aids; Preparation and maintenance of other apparatus.

(iii) Measurement and Diagnosis.

(iv) Practical aspects of Health Education, Citizenship Training and Physical Education.

(v) Arts and Crafts, Basic Crafts, Hobbies or Home Science for Women.

N.B.—(*a*) The course in General Methods (C) shall cover principles common to all subjects and shall include an introduction to the teaching of Languages and other subjects for all students.

(*b*) The courses in Special Methods (D) shall be brief courses, supplementary to the course in General Methods.

(*c*) Practical Training shall include attendance at Schools for not less than 25 days in the year. At least 15 of these (3 weeks) shall be continuous. The programme for each student shall approximate to the normal daily work of a teacher.

(*d*) Each College shall decide the Arts and Crafts, etc. to be taught under F(v) and shall submit a syllabus in the subject or subjects chosen to the Supervising Examiners for approval.

Scheme of Examination :

2. (a) *Written Examination* :—The subjects and the Scheme of Examination shall be as follows : —

1. Principles of Education and School Organisation (A)—3 hours—100 marks.

2. Educational Psychology and Sociology (B)—3 hours—100 marks.

3. Methods of Teaching and learning—General (C)—3 hours—100 marks.

(In this Paper each candidate shall be required to answer three questions on General Methods and two questions on the introduction to the teaching of subjects other than those chosen by him under D).

4. Methods of Teaching and Learning Special (D) (Optional Subjects)—3 hours—100 marks.

(In this Paper, each candidate shall be required to answer 3 questions in each of the two subjects offered by him or 2 questions in each of the three subjects offered by him).

5. Health Education, Citizenship Training and Physical Education—3 hours—100 marks.

Total (5 Papers)—500 marks.

(b) *Practical Tests* :—Marks for the various aspects of Practical Training shall be allotted as follows : —

1. Teaching Practice [F(i)]—200 marks.

2. Practical working and Maintenance of Audio-Visual Apparatus, etc. [F(ii)]—100 marks.

Measurement and Diagnosis [F(iii)]—100 marks.

Arts and Crafts or Home Science [F(v)]—100 marks.

3. Practical aspects of Health Education and Citizenship Training (50) and Physical Education (50) [F(iv)]—100 marks.

Total : 400 marks.

N.B.—(1) The University shall appoint Supervising Examiners who shall advise each College regarding Practical Training and Practical Tests. It shall be the duty of Supervising Examiners, (*a*) to observe and evaluate the lessons of some students of each College during the three weeks of continuous Teaching practice and also on other occasions, with a view to the equation of standards, (*b*) to examine and

decide doubtful cases (i.e. near failures), (*c*) to examine and decide exceptional cases (that is those for whom 60 per cent and above is recommended by the College), and (*d*) to moderate the results of the Practical Tests in the several Colleges.

(2) For the purpose of Teaching Practice [F(i)] each student shall work as an "apprentice" under a selected teacher and under the general supervision of the Principal and Lecturers of the College concerned. He shall also maintain a Work Book of Practice Teaching. Marks for Teaching Practice shall be based on reports of at least 5 lessons in each subject, together with the Work Book. Each such lesson shall be reported separately by a Lecturer or Teacher appointed by the Principal, and the reports and Work Book shall be made available to the Supervising Examiners. The final reports of the Colleges on each student, together with their Work Books, shall be submitted to the Supervising Examiners whose decision as to the marks to be awarded shall be final.

(3) For other aspects of Practical Training [F(ii), (iii), (iv), (v)] each student shall work under a Lecturer and shall maintain a Work Book under his supervision. Marks in these subjects shall be suggested by the Lecturer concerned. All Work Books shall be submitted to the Supervising Examiners whose decision as to the marks to be awarded shall be final.

(4) Marks for Practical Work in Basic Education shall be entered under Arts and Crafts [F(v)] and shall be based on a Work Book in that subject.

(5) The Supervising Examiners shall report to the University the marks awarded to each student in the several subjects.

(6) A candidate who fails in the Practical Test may present himself at a subsequent examination at which the Supervising Examiners shall examine the candidate in Practice Teaching [F(i)] and in such aspects of F(ii), (iii), (iv), (v) as they may consider desirable.

Passing Minimum :

3. No candidate shall be admitted to the B.T. Degree unless he has passed both the Practical Test and the Written Examination:

Provided, however, that a candidate who fails in the Practical Test and passes in the Written Examination shall be regarded as having failed in the Practical Test only and shall be permitted to appear again for the Practical Test, and vice versa.

A candidate shall not be permitted to appear for the Practical Test on more than two occasions, provided, however, it shall be competent for the Syndicate, if the Board of Examiners so recommend, to permit the candidate to appear on a third occasion.

A candidate shall be declared to have passed the Written Examination if he obtains (i) not less than 35 per cent in each of the five papers and (ii) not less than 40 per cent in the five papers taken together. All other candidates shall be deemed to have failed in the Written Examination.

A candidate shall be declared to have passed the Practical Test if he obtains (*a*) not less than 35 per cent in Teaching Practice [F(i)], (*b*) not less than 35 per cent in Subjects F(ii), (iii), (iv), (v) taken together, and (*c*) not less than 40 per cent in the 5 subjects taken together.

Classification of successful candidates:

Successful candidates shall be classified separately for (*a*) the Written Examination and (*b*) the Practical Test. In each case, successful candidates who obtain not less than 60 per cent of the total marks shall be placed in the First Class and those who obtain not less than 50 per cent of the total marks shall be placed in the Second Class. The remaining successful candidates shall be placed in the Third Class.

Shortened Course for Bona fide trained teachers:

4. Notwithstanding anything contained in Regulation 2 above, about the duration of the prescribed course, it shall be competent for the Syndicate to admit to the B.T. Degree Examination certificated *bona fide* trained teachers who have passed the B.A. Degree Examination and who have undergone a shortened course of instruction approved by the Syndicate, of not less than 3 months' duration, conducted by a Training College or by Training Colleges in co-operation; and who satisfy the general rules relating to the grant of exemption to *bona fide* certificated trained teachers prescribed by the Syndicate for admission to the Matriculation, Intermediate and B.A. Degree Examinations.

B.T.s qualifying in additional subjects:

5. A candidate who has taken the B.T. Degree shall be permitted to appear again for the examination in a new subject or subjects under Section D.—*Methods of Teaching and Learning*—provided that he has taken a Pass Degree or a University Diploma in the additional subject or subjects selected, and has had at least three years of teaching experience in such a subject or subjects.

He shall be declared to have passed the examination if he obtains not less than 40 per cent of the marks in both the Written and the Practical Tests.

SYLLABUS

A. Theory of Education and School Organisation.

I. Theory of Education

1. The Approach to Education: Historical—Outlines of Ideals and Practice in Ancient, Medieval and Modern times.
2. The Approach to Education: Scientific—Need for the aid of Biology, Physiology, Psychology, Sociology, Logic and Statistics.

Aims of Education and their Evaluation—Livelihood; Learning; Social Efficiency; Character; Leisure—Development of Balanced Personality—Self-help and mutual co-operation. The problem of maintaining a balance between raising the level of the average and giving opportunity to the gifted.

4. The Educative Process:

A. (i) as the Sharing of Traditions or Social Heredity;

(ii) as the Achievement of many-sided interest;

(iii) as Adjustment between the Individual and his Environment.

B. (i) The Nature of the Environment,—(*a*) The World of Nature; (*b*) The World of Men; (*c*) The World of Values.
The natural meeting point of (*a*) and (*b*) in crafts.

(ii) The Nature of the Individual—Need for the study of general development of body, intellect, skills, character, sociability, taste. The problem of individual differences.

(iii) The Relationship between Teacher and Pupil. Marks of a good Teacher. Education as Personal Guidance.

C. Consequent Problems:

(i) Child and Subject; Learning and Teaching; Individual and Society.

(ii) The Problem of Curriculum. What to learn and teach?

(iii) The Problem of Method. How to learn and teach?

5. Aspects of the Curriculum, discussed in relation to Aims of Education.—(*a*) Dependence upon Aim, (*b*) Theory of Formal Discipline, (*c*) Knowledge and Experience, (*d*) Instrumental Skills: Reading, Writing, Arithmetic, Crafts, (*e*) The Place of Physical Activities, Handwork, etc., (*f*) Integration of the Curriculum through a Central Craft, through Projects, through Teacher Co-operation—Evaluation of these Methods, (*g*) Diversified Courses at the Post-Basic stage, (*h*) Adjustment to changing Community Needs, (*i*) Adjustment to Individual Capacities.

II. *School Organisation*

Note.—This course should be presented so as to show that organisation must incorporate the aims and principles of education.

1. *School Life.*

   (*a*) Self-government — organisation of community life — school assembly—functions of school pupil-leader, class pupil-leader, etc.

   (*b*) Cultural activities—celebrations—literary meetings—dramatic performances and musical evenings—excursions—library and study groups—broadcasts—scouting.

   (*c*) Residential life—supervision, order and arrangements—recreations—traditions.

2. *Buildings and Compound.*—Site—playground—garden—assembly room—class-rooms—craft rooms—library—museum—staff room—office—ventilation, lighting, sanitation—residential facilities—dormitories—dining rooms, recreation.

   Staff.—Role of the teacher in the national and educational reconstruction programme—headmaster and his duties—class teacher *v.* subject teacher—inspection—professional etiquette.

4 *Management.*—Staff-meeting—daily programme—time-table—class organisation—responsibilities for libraries and museums.

5. *Co-operation between the school, home and community.*—Parent-teacher-association—parents' days—home-work—tuitions, professional organisations.

   Social service, rural reconstruction, adult education.

B. Educational Psychology and Sociology.

I. *Educational Psychology*

1. *Introduction.*

   What is Psychology ? Relation to Educational Psychology. Educational Psychology—Its scope and methods.

2. *Basic Factors.*

   Heredity and Environment. Physiological bases of mental life ; receptors, connectors, effectors ; reflexes ; Notes on the glandular and muscular systems—the idea of the organism as a whole—growth, development and maturation—instincts and emotions—cognitive, affective and conative aspects of mental life.

   Modification of Behaviour—Knowledge and Experience.

   " Conditioning "—Perceptual thinking ; Appreciation, sense training, observation—Ideational thinking including imaginative and conceptual thinking—judging and reasoning.

Attention, interest, effort.

The laws of learning ; learning through purposeful and productive activity, Verbal Learning—remembering, forgetting, fatigue—the transfer of training.

4. *The Growth of Character.*

Instinctive behaviour and its modification—Psychological needs, security and freedom—Sentiments.

Habits, will, character, personality.

The stages of development, intellectual, social and emotional.

Development in infancy, childhood and adolescence.

Play. Discipline.

The unconscious in Education, mental conflict, maladjustment.

5. *The Group Mind.*

Social groups—sympathy, suggestion, imitation.

6. *Human Abilities and their Measurement.*

General intelligence and special abilities and their measurement —Personality ratings—Cumulative records.

7. *Individual Differences.*

(*a*) Differences due to heredity, maturation, environment and training—cognitive, affective and conative.

(*b*) The gifted child ; psychological characteristics, special abilities, the care of the gifted.

(*c*) Backward, clumsy and mal-adjusted children ; definition of backwardness ; natural backwardness ; special disabilities ; conditioned backwardness and its causes ; care of the backward.

Clumsiness, natural and conditioned ; causes and treatment.

Maladjustment and delinquency ; causes ; common behaviour problems and their treatment.

II. Educational Sociology

1. *Introduction.*—Essential mutual relationship of individual and society (neither understood apart from the other)—evaluation of behaviour by reference to social norms—desire for recognition, acceptance and approval by the group.
2. *Social Structure.*—Significant groups ; family circle, wider family ; school class, gang, school, community, nation, State, etc.—widening of contacts with age.
3. *The Educative Society.*—Influences other than the school : home, occupational group, socio-economic group, community, religion (associations, festivals), cinema.

4. *Social Cohesion.*

(*a*) Types of social groups: crowd, association, community.

(*b*) What welds a group together: common experience, tradition, aims, ideals, social conditioning—need of unifying factor, choice of right factor—limitations and dangers of the idea of the state or party as unifying concept.

(*c*) Importance of school traditions—social training within the school; leaders and followers—ways of promoting co-operation in study, activities, games, corporate life—the school as a model community—participation of Head, teachers and pupils—Citizenship Training.

5. *Causes of Conflict.*—Prejudice, stereotypes, in-group and out-group (we and they), conflicting loyalties, need for 'straight' thinking.

6. *Interaction of Groups and Individuals.*

(*a*) Individuals can modify groups; leadership, the good leader, the influence of the teacher, the Head—relativity of leadership, qualities that appeal at different ages and in different situations —training in responsibility.

(*b*) Groups can modify individuals: the importance of 'tone', sympathy, imitation and suggestion—the treatment of the anti-social child.

7. *How Social Relationships are Measured.*—Sociograms, attitude questionnaires and scales.

C. Methods of Teaching and Learning—General

I. *General*:

1. Emphases in Modern Education. Child and subject, learning and teaching, individual and class, play and work.
2. The Teaching—Learning Process as the sharing of educative experience: (*a*) Direct Experience (Learning by doing), (*b*) Indirect experience (Verbal, Pictorial and Symbolic learning) —their inter-dependence—need for varied emphasis according to age and development of child, nature of subject-matter, general and special aims of the course.
3. Methods emphasizing Direct Experience: Play-ways, Montessori Method, Object Teaching, Project Method, Basic Education, Problem or Heuristic Method.
4. Methods emphasizing Indirect Experience: (i) Oral communication (narration, description, explanation, definition—questioning—group studies, debates, dramas, the gramophone and the radio) (ii) Printed information (text-books, reference books,

libraries, newspapers and magazines) (iii) Pictures, Diagrams, the Cinematograph.

5. Planning the year's work: (i) Study of syllabus. (ii) Appreciation of procedure involved (chronological or concentric arrangement—psychological or logical order). (iii) Allocation of work per term. (iv) Analysis into Method Units and Lessons.
6. Planning the Method Unit and Lesson: Arrangement of subject-matter; Planning teacher and pupil activities (individual and group); Selection and preparation of teaching aids; Notes of lessons (Motivation, Presentation, Practice, Testing).
7. Use of Teaching Aids and Procedures: blackboard, pictures, models, diagrams, books and magazines, films (silent and sound), broadcasts, museums, exhibitions, excursions—the art of questioning, assignments, notebooks and diaries.
8. Educational Measurement: Testing, Diagnosis, Guidance—Old-type and new type tests—preparing, applying and marking tests —utilising results.
9. Moral Education: Direct and indirect ways—sharing responsibility—biography, problems of conduct (individual and social), trait studies—ethical, social and aesthetic appreciation.

II. *Introduction to the Teaching of Various School Subjects*:

Note.—The aim of this part of the course is to give every teacher a general idea of the work done in all class rooms and an intelligent appreciation of teaching as a whole. (About 15 Lectures may be required for this part.)

(*a*) Teaching of Languages:

(i) Teaching the mother tongue: Functions of Language (receptive, expressive and creative); importance for all subjects; importance of early training in correct and fluent speaking; oral work and composition; choice of significant subjects; oral reading and silent reading; choice and use of books, study of handwriting, spelling and grammar.

(ii) Teaching a modern foreign language: values, practical and cultural; stage at which to begin; comparison with methods in mother tongue; use of mother tongue and co-operation between teachers of languages; translation and other methods; learning to speak, read and write; study of handwriting, spelling, grammar and composition.

Difference in the methods of teaching classical and modern languages.

(b) Teaching Mathematics: Correlation with life and with other subjects; graphic representation; basic principles of teaching

mathematics; problems, exercises; accuracy and speed; oral, mental and written work; diagnosis and correction of errors.

(c) Teaching sciences: Correlation with other subjects; application of science to every-day life; scope of general science; scientific interests and activities of children; popular science; hobbies; demonstration and practical work; the scientific method.

(d) Teaching social studies: Nature of social studies; aims and values; observation and practical work, use of books, making of charts and maps, excursions and visits.

(e) Teaching of art and craft: Place of art in education; art and social needs; skill and appreciation; production as a means of cultivating discrimination and training in appreciation; an artistic environment; different types of pupils and their needs.

(f) Home science—as an application of the arts and sciences to the house and home life; training the child to share in the activities and responsibilities of the home; the scope of the subject; general methods of approach; co-operation of the school with the home and home practice.

D. SYLLABUS IN SPECIAL METHODS OF TEACHING SCHOOL SUBJECTS.
(Omitted.)

E. HEALTH EDUCATION, CITIZENSHIP TRAINING AND PHYSICAL EDUCATION.

I. *Health Education*

Introduction: (*a*) To be effective, instruction must centre round healthful experiences gained during the entire training course.

(*b*) Three important aspects of Health Education:—(1) Health Supervision, (2) Health Service, and (3) Health Instruction.

1. *Health Supervision* includes all these procedures by which the hygiene of the school environment is maintained at a high standard—Cleanliness of the school buildings, class rooms, lavatories, playgrounds, gymnasia, etc. to receive special attention from the administration as well as from pupil teachers—Co-operative effort to promote healthful living conditions, orderliness and beauty.
2. *Health Service*: Health examination, follow-up work and correction of defects—Provision for protective measures such as vaccination, inoculation, etc.,—School health clinic.
3. *Health Instruction*: Aim to provide necessary health knowledge and methods of teaching pupils the ways of healthful living.

(i) *Personal Hygiene*

(*a*) Care of skin, hair, scalp, feet, hands, teeth, mouth, nose, throat, ears, eyes and the organs of excretion.

(b) Fresh air and sunlight, exercise, rest and sleep ; nutrition and wholesome. eating habits.

(ii) *Mental and Emotional Health*

(a) Importance of a healthy mind and a healthy outlook.

(b) Importance of healthy relationships and contacts with others.

(iii) *Sex Education*

Aim to impart knowledge of sex and reproduction, and methods of teaching sex education (individual talks, film strips, wholesome literature, etc.)—Necessity for sympathetic understanding of sex problems.

(iv) *Community Hygiene*

Communicable diseases, their cause, symptoms, methods of prevention. and prophylaxis ; isolation, quarantine, etc. Water supply and disposal of waste.

(v) *Common Ailments of School Children*

Diagnosis of common ailments such as adenoids, septic tonsils, posture defects, anaemia, scabies, whooping cough, measles, sore eyes, ringworm, common colds, influenza, etc. Methods of making a daily health inspection.

(vi) *Safety Education and First Aid*

(a) Safety measures in the home, the school, the playground, and the highway.

(b) *First Aid.*—Treatment of injuries such as fractures, dislocations, haemorrhage, asphyxia, hysteria, epilepsy, fainting, poisoning, burns, etc.

(vii) *Health Projects*

Health weeks, health surveys, health exhibitions, cleanliness campaigns, visits to hospitals, clinics, Welfare Centres, etc.

II. *Physical Education*

Three aspects of the Physical Education Programme :—(1) Theory. (2) Practical work. (3) Teaching practice.

1. *Theory.*—Relation of Physical Education to other aspects of education—Physical activities suitable for various age-groups—marking and maintaining play courts—organisation and conduct of intramural competitions—methods of handling groups for various kinds of activities—lesson plans—methods of supervising and assisting in physical education classes.

2. *Practical Work* :

(a) *Complsory for all.*—Handling large or small groups—Fundamental Commands—Marching—Teaching and leading exercises. Each student to know and play a variety of small area games selected from the Syllabus of Physical Education for Secondary Schools.

(b) *Optional.*

(i) Playing and learning to conduct and coach major games such as football, hockey, cricket, basketball, volleyball, kabadi, etc. and also track and field sports.

(ii) Devising and practising activities and games which involve the skills of major games.

(iii) Organising and playing intramural games.

(iv) Participating in Inter-Collegiate activities.

(c) *Special Projects.*—In addition to the above two, special projects in Physical Education may be organised from time to time. Some of these may be (1) Track and Field Sports organised by the pupil teachers. (2) Demonstrations. (3) Tournaments, etc. All the trainees should join both in organising and participating.

3. *Teaching Practice* :

(*a*) Compulsory—Taking 5 lessons in physical education where each lesson should consist of some marching or suitable introductory activities, teaching and leading a few selected exercises, teaching and playing one or two minor games. Three of these to be supervised by a trained Physical Education Teacher authorised by the College.

(*b*) Optional—Organising, coaching, playing and officiating at games in selected schools. This work need be done only by those who show aptitude and ability in games.

III. *Citizenship Training*

(a) *Aim* to try out in practice the scheme as laid down in the Departmental Guide Book on Citizenship activity and to work out the Training syllabus followed in the Departmental training courses for Citizenship teachers.

(b) *Organisation of Course.*—Training to begin with a ten days' outdoor camp (preferably at beginning of First Term) where students learn to live as 'pupils' of a school training group to be divided into 'classes' and 'squads'. Class pupil leader and school pupil leader to be elected. School activities, including camp duties to be undertaken in rotation by squads and classes. The class council, school council and school parliament to function.

Students will also receive, during the camp, practical instruction as indicated in the Syllabus. Division into classes and squads to be continued in the College. School duties and activities to be assigned to them. This training to be kept up throughout the year.

(c) *General aspects*:

1. Why Citizenship Training?—general ideas of citizenship—qualities which make for good citizenship—how such qualities may be acquired—Relationship of Citizenship Training to extra-curricular activities such as Scouting, Junior Red Cross, etc.
2. School organisation as a means to Citizenship Training.
3. Suitable activities for Citizenship Training—the Citizenship period in the time-table—the citizenship teacher—facilities needed for citizenship training.
4. Citizenship Training in relation to girls and to boys—junior and senior grades—differences that matter—the spirit and aim of the scheme.

F. (ii) Practical Training

Audio-Visual Aids

Each student should make a special study of the audio-visual aids appropriate to his optional subjects and, in connection with his study of special methods, should plan the preparation and follow up work necessary for film shows and broadcasts. Notes of the preparation and follow-up work should be kept, with a brief note of the film or broadcast for which they were intended.

Mechanical Aids—Visual:

Complete setting up and running of epidiascope, and film strip projectors. Use of film projectors.

Preparing transparencies, pictures and objects for projection.

Placing of audience.

Preparing for, conducting (commentary) and following up shows.

Broadcasts:

Tuning in and adjusting of Radio suitable to size of audience.

Preparing for, conducting and following up Broadcasts.

Pictures: Selection, Indexing and Filing.

Charts:

Preparation, indexing and filing of charts suitable for optional subjects.

Work book in the prescribed form and portfolios of pictures and charts should be kept by each student.

F. (iii) MEASUREMENT AND DIAGNOSIS

1. Study of sample tests of different kinds.—(i) intelligence, achievement, aptitude, (ii) scales: writing, drawing, compositions, etc.
2. Construction of each type of test appropriate to the students' optional subjects, (i) with varying aim:—teaching, pre-view of existing knowledge and skills, checking results of teaching, promotion, diagnostic; (ii) of various types: (*a*) essay type, (*b*) new type:—true-false, multiple choice, completion, matching, classification; use of illustrations, maps, diagrams, graphs, charts.
3. Diagnostic analysis of at least 35 specimens of one test with suggestions for remedial work. Administration of tests to be included within the teaching practice.
4. Simple statistical procedures:—Frequency distribution, percentiles, quartiles, measures of central tendency, measures of variability, reliability of measures, correlation.—These procedures to be applied to actual tests constructed and given by the student.

A record of all tests is to be kept by the students, including the statistical analysis of tests given.

16. *Mysore University*: The ordinances and regulations of the Mysore University are given below:—

1. The course of study for the Degree of Bachelor of Teaching shall extend over one year at the conclusion of which there shall be an examination comprising the subjects mentioned below:—

Group A (Theoretical)

(i) Principles.

(ii) Educational Psychology, including Mental and Educational Measurements.

(iii) General Methods and Methods of Teaching English (Compulsory).

(iv) Methods of Teaching Special Subjects.

(v) Comparative Study of Educational Systems, with special reference to problems of Indian Education.

(vi) School Organisation and Management.

(vii) Class Records in Mental and Educational Measurements.

Group B (Practice in Teaching)

EXAMINATION AND CLASS WORK

Notes.—(1) No separate minimum will be required in respect of class marks in Mental and Educational Measurements, the marks in which will count towards the aggregate of Group A.

(2) (*a*) The course in respect of Methods of Teaching Special Subjects under Group A shall comprise:

Methods of Teaching—one of the following subjects:

English (Optional), History, Geography, Mathematics, Science.

(*b*) The course in respect of 'Practice in Teaching' under Group B shall comprise:

(i) the teaching of English (Compulsory) ;

(ii) the teaching of one of the following subjects:

English (Optional), History, Geography, Mathematics, Science.

2. No candidate shall be declared to have passed the B.T. Degree Examination, unless he obtains not less than 40 per cent of the total marks under A and B separately with a minimum of 30 per cent in each subject of Group A. Of passed candidates, those that obtain 60 per cent or more of the total marks shall be placed in order of merit in the first class, others obtaining not less than 50 per cent in the second class likewise in order of merit, and the rest in the third class in alphabetical order:

Provided that the names of candidates who pass in Groups A and B in different years shall be published in a separate list in alphabetical order.

Candidates for the B.T. Degree Examination who have passed in Group "A" (Theoretical) or in Group "B" (Practice of Teaching) shall be permitted to appear again for the Group in which they have failed. Candidates who pass in either group shall be declared to have passed in the group only.

SYLLABUS

(1) *Principles of Education*

1. The need for an adequate Philosophy of Life and Education. The changing nature of the present-day world. The demands on education. The problems of life and education in India. Relation between them.

2. The aims of Education. A historical and critical survey of some educational aims: narrow aims. Mind, body, intellect, character, practical efficiency—personal culture, knowledge, mental power. Comprehensive aims. Harmonious development of the individual, personal

and social growth, education as continuous reconstruction of experience. Aims in terms of human wants.

3. The Agencies of Education. The Family. The Community. The Church. The State. The School. Their interdependence.

4. Data of Education: innate tendencies of the child. Social inheritance. Nature and nurture. Individual differences and their educational implications.

5. Materials of instruction: the various stages of child development and curriculum for different stages.

6. The curriculum: Principles of curriculum construction. Objectives, a basis for curriculum construction. School studies, their values and their classification.

7. The method of instruction: general principles.

8. Outcomes of the educational process: knowledge, meanings, facts; principles; habits, skills; and ideals and attitudes.

9. The method of appraisal: general principles.

10. Recent developments in educational practice. The Project Method. The Dalton Plan, the Howard Plan, the Winnetka Plan, the Gary Plan. The Platoon School, Nursery Education.

(2) *Educational Psychology including Mental and Educational Measurements*

I. Educational Psychology

A. *Introductory*

Scope of educational psychology. Methods of psychological study and investigation as applied to educational problems.

The biological background of education—Laws of heredity. The part played by environment in the development of innate traits. Are acquired traits inheritable?

B. *The Acquisition of Knowledge and Skills*

1. The learning process: Forms of learning. Laws of learning. The problem of transfer of training. Motivation of learning.

2. Attention: Its nature and types. Causes and symptoms of inattention. Favourable conditions for securing sustained attention.

3. Fatigue: Types, symptoms and causes of fatigue. Preventive and remedial measures for school fatigue.

C. *The Inculcation of Right Habits of Thinking*

1. Thought and its relation to language. Growth of language mechanisms from childhood.

2. Empirical and scientific thinking. Common errors in thinking. The cultivation of the scientific attitude of mind.

3. What is intelligence? Growth and maturity of intelligence. Is intelligence innate?

D. *Psychology of Character Training*

1. The shaping of the basic impulses of Curiosity, Escape Pugnacity, Appeal, Parental protection, Herd, Sex, Laughter, Play, etc. for purposes of character building.

2. The problems of Freedom, Authority and Discipline from the psychological standpoint.

3. The educational applications of Psycho-analysis.

II. MENTAL AND EDUCATIONAL MEASUREMENTS

A. *Introductory*

1. Inaccuracies in the current system of marking and examinations. Unreliability of estimates of intelligence and character traits. Essentials of valid measurement.

2. Some simple statistical concepts and devices such as the Normal Curve of Distribution, the Median, the Semi-interquartile Range, the Probable Error and the Foot-rule method of correlation.

B. *Mental Measurements*

1. Tests of general ability: Individual, Group, Performance and Pre-School tests of intelligence.

2. Principles of test construction. Limitations of intelligence tests. The value of intelligence tests for the teacher.

3. Objective methods of diagnosing personality traits.

C. *Educational Measurements*

1. Tests suitable for the Primary and Middle Schools such as Reading, Spelling, Grammar, Composition, Arithmetic, etc.

2. Attainment tests suitable for High School grades for subjects such as History, Georgraphy, Science, etc.

3. Principles of educational test construction. Establishment of norms. The value and limitations of new examination methods.

(3) *General Methods and Methods of Teaching English (Compulsory)*

I. GENERAL PRINCIPLES OF METHOD

1. The meaning of Method—broad and narrow.

2. The process of teaching; general principles of teaching and learning.

3. The planning of Instruction Teaching units ; Lesson plans and notes of lessons.

4. The Method of Instruction. The maxims of method ; their uses and limitations. Different types of lessons and their applicability to classroom teaching.

5. Devices of Teaching ; text-books, their uses and abuses. Collateral reading. Questions and Answers, Examinations. Illustrations. Note Books.

II. METHOD OF TEACHING ENGLISH (COMPULSORY)

1. Language in human life. General principles of teaching and learning languages.

2. Ancient and Modern languages. Mother tongue and foreign tongue —Principles applicable to their teaching.

3. Aims of language teaching: (1) Comprehension, (2) Expression, and (3) Appreciation—linguistic and aesthetic.

4. The language problem in India—position of Modern Indian languages and of English.

5. Methods of teaching: (1) Direct Method, (2) Translation Method, (3) Comparative Method, and (4) West's New Method.

6. Teaching of Reading, Handwriting, Spelling, Grammar and Composition.

7. Teaching of English Prose and Poetry. Cultivation of understanding and appreciation.

(4) *Methods of Teaching Special Subjects*

A. English (Optional).
B. History.
C. Geography.
D. Mathematics.
E. Science.

(Detailed syllabuses are omitted here.)

(5) *Comparative Study of Educational Systems*

(i) Introductory :

The aims of a national system of education. The remarkable growth of national systems in the 19th century. Brief survey of Pre-British Education in India—Maktabs, Patasalas, Mutts and Madrasahs. History of British Education in India. The problem of a national system of education for India.

(ii) Educational Administration :

Central and Local Control of Education, Advantages and Disadvantages.

England: (1) Central Control: The Board of Education. Its Organisation and Functions. The Inspectorate.

(2) Local Control: The Borough and County Councils. Education Committees—their powers and responsibilities. Relation of central and local authorities.

United States of America: The Federal Agencies for Education. Decentralisation. Recent tendencies towards centralisation within each State. Local bodies in each State.

India: (1) Central Control: Centralisation of control within each Province. The Minister of Education. The Director of Public Instruction. The Inspectorate.

(2) Local Control: District Boards and Municipalities—their powers and responsibilities.

(iii) Educational Organisations:

Diversity of practices in England. England more a political than a social democracy. Democratic system of education in the United States of America. The Common School Tendencies in India.

General organisation of the school systems in England, United States of America and India.

(iv) Elementary Education:

Aim, organisation, curriculum, staff, methods and tendencies of elementary education in England and the United States of America.

India: Problem of illiteracy and Educational Mortality. Compulsory Education. Difficulties of enforcement.

Present state of legislation and practice in various provinces.

(v) Post-Elementary Education:

Post-Elementary Education different from Secondary Education. England: The Senior Elementary Schools and the Central Schools. United States of America: The Junior High School. India: The present tendency of all elementary education leading to Secondary Education. Senior vernacular and higher elementary schools—Need for greater development.

(vi) Secondary Education:

England: the Public Schools, Grammar Schools, Council Schools and Private Secondary Schools. Marked Features of English Secondary Education.

U.S.A.: The Junior and Senior High Schools—Special features of American Secondary Education.

India: Present Organisation of Secondary Education. Defects of Grant-in-aid system. The problem of medium of instruction. Uniformity of type. Need for diversity of institutions. Introduction of vocational courses.

(vii) Vocational Education:

England: Junior and Senior Technical Schools. The Polytechnics. U.S.A.: The Federal Board for Vocational Education.

Part-time and Full-time Vocational Schools. Senior High Schools. Technical Colleges.

India: The literary and non-practical character of Indian Education. Hartog Committee recommendations. Need for and problems of Vocational Education.

(viii) Women's Education:

A brief survey of the development of educational facilities for women in England and U.S.A. together with the special features of women's education in those countries.
India: Problems of women's education. Modern Ideals of Indian Womanhood. The problem of co-education, aim, organisation, curriculum and present tendencies in women's education.

(ix) Training of Teachers:
England: Importance given to Teacher Training. The Training Colleges and the University Training Departments. Refresher Courses.
U.S.A.: The Normal Schools and the Training Colleges of Universities. Summer courses.
India: The Undergraduate and Graduate Training. Nature and period of training.

(x) Adult Education:
Aim, contents, methods and organisation of Adult Schools in England and U.S.A. The problem in India with special reference to methods of rapid literacy and propaganda regarding the value of education. Social and liberal nature of adult education.

(6) *School Organisation and Management*

A. The Social Aspect of School Life:

The social life of the school. The problem of school discipline. Government and management of social life in school. Organisation and management of extra-curricular activities. Civic and moral instruction as a means of social adjustment. The problems of religious instruction. Sex education as a factor in social adjustment. Extraneous motives to conduct. Reward and Punishment.

B. The Intellectual Aspect of School Life:

Classification and promotion of pupils. Co-education of boys and girls. Daily programmes of work. Appraisement of work. School records and reports.

C. The Health Aspect of School Life:

Health instruction. Physical education. Healthful school conditions—school building, equipment, etc. Health service and supervision.

D. General:

The headmaster and teacher in relation to school organisation and management. School inspection and direction. The school and the home and the community.

SCHEME OF EXAMINATION

	Max. Marks.
Group A: Theory—	
(i) Principles (3 hours)	100
(ii) Educational Psychology, including Mental & Educational Measurements (3 hours)	100
(iii) General Method and Methods of Teaching English (Compulsory) (3 hours)	100
(iv) Methods of Teaching Special Subject (3 hours)	100
(v) Comparative Study of Educational systems with spl. ref. to Problems of Indian Education (3 hours)	100
(vi) School Organisation and Management (3 hours)	100
Total	600
(vii) Class Records in Mental and Educational Measurements	50
Total Group A	650
Group B: Practice in Teaching—	
Examination	200
Class Work	50
Total Group B	250

Note:—No separate minimum will be required in respect of class marks in Mental and Educational Measurements, the marks in which will count towards the aggregate of Group A.

17. *Nagpur University* The ordinances and regulations of the Nagpur University regarding the B.T. degree are given below :—

The examination shall consist of two parts :

Part I.—Written examination consisting of the following :

(1) Principles and Practice of Education.

(2) Educational Psychology.

(3) Methods of Teaching Particular Subjects (including Music and Home Science).

(4) School Organization and Hygiene.

(5) History of Education.

Part II.—Practical Teaching. The practical teaching of the candidates will be judged by

(1) their teaching during the year of training ;

(2) a final test : two lessons to be given in two different school subjects one of which must be a language or Science or a basic craft.

Besides passing the examination in Part I and Part II, candidates will be required to have completed satisfactorily courses in the following at the college :—

(1) Physical Training.

(2) Pedagogical Drawing.

(3) English Phonetics.

A certificate to this effect from the Principal of the College shall accompany every application for admission to the examination.

Marks and classification shall be as follows :—

Part I

Marks obtainable in each paper	50
Aggregate marks obtainable	250

Part II

Marks obtainable during the year assessed by the Principal of the College	100
Marks obtainable in Final Test	100
Aggregate marks obtainable	200

In the examination in Part I, examinees obtaining not less than 150 marks shall be placed in the first division ; examinees obtaining less than 150 marks but not less than 125 marks shall be placed in the second division ; examinees obtaining less than 125 marks but not less than 80 marks shall be placed in the third division.

In the examination in Part II, examinees obtaining not less than 160 marks shall be placed in the first division; examinees obtaining less than 160 marks but not less than 120 marks shall be placed in the second division; examinees obtaining less than 120 marks but not less than 80 marks shall be placed in the third division.

In order to obtain the degree of Bachelor of Teaching an examinee must pass in each part of the examination. If an examinee fails in one part only, he may present himself for examination in that part on payment of a fee of rupees twenty:

Provided that he shall not be admitted to the examination in Part II, unless he produces a certificate from the Inspector of Schools of the Circle concerned stating that he has served for a period of not less than four months (*a*) as a teacher in a recognised educational institution or (*b*) as an administrative officer.

In the case of an examinee re-admitted to the examination in Part II, no marks shall be awarded for Teaching during the year but the Final Test shall carry 200 marks. The Principal of the college and the examiner at the Practical Examination shall each allot marks upto a maximum of 100, the total for the Test being 200.

SYLLABUS

PART I

PAPER I—*Principles and Practice of Education.*

(i) *Principles*: (1) Meaning of education: need for a theory of education. Aims and ideals of education as propounded by the leading exponents of education.

(2) Nature and characteristics of early informal education; development of formal education.

(3) Agencies of informal education and their relation to the work and problems of the school.

(*a*) The Home: Its function in shaping the child; early development; its relation to the school—home and school co-operation.

(*b*) The Local Community: Its relation to the school; the position of the teacher in the community; the school as an agency for community service.

(*c*) The Vocation: Importance in modern life; vocational *v.* liberal education; the place of productive work and crafts in education.

(*d*) The State: The historic background of the relation of the State to education; the present position of the State with reference to education; the scope and limitations of State interference. The meaning of civic education in democratic and totalitarian states. Democratic conception of education and its implication for India.

(*e*) Culture: The influence of the cultural environment of the child; the school as an agency for the transmission and reconstruction of culture.

(*f*) Religion: Its educative significance; traditional association with education and educational institutions. The modern secular tendency in education. The problem of religious education in India.

(4) The School as an agency of formal education. Its function and relation to the individual and society. Different types of schools and their functions.

(5) Principles of determining curricula and syllabuses.

(6) Aesthetic education; its relation to general education.

(7) The Ideology of Basic Education.

(ii) *Practice*: The learning process; the teaching process. Maxims of teaching and their significance. Preparation and planning of lessons. Types of lessons: inductive, deductive, narrative, drill, review, appreciation, skill, inspirational. Framing of teaching syllabuses and plans of work. Correlation of subjects. Teaching devices and aids. Questioning, answering, illustration. Demonstration. The use of the blackboard. Home-work. Correction of written work. Choice of text and other books. School libraries and their organisation. Tests and examinations. Modern developments in educational practice. Montessori Method; Dalton Plan; Play-Way; Project Method; Gary and Winnetka Plans. Education through craft.

PAPER II—*Educational Psychology*

The nature and functions of educational psychology; the nature of the mind and its relationship with the body; the nervous system and the endocrine glands; sensation: perception; instincts and innate tendencies; imagination; memory; association; attention; the intellect; the feelings and emotions; the will; habit formation; the learning process; the process of growth and development; individual differences; character formation; the transfer of training; motivation; the influence of the unconscious on behaviour; statistical methods in education; the measurement of intelligence; the process of effective study; the principles of mental hygiene.

Experimental Psychology:

I. *Qualitative and Quantitative study of the growth of Cognitive Abilities.*

Relation-Finding and Correlate-Finding.

Span of Apprehension.

Retention.

Association.

Recollection. Recognition.

Practice, Fatigue and Oscillation.
Imagery.

II. Observation and Report.
Observation and Description.
Testimony.

III. *Qualitative and Quantitative study of Affection and Conation.*
Reaction Time experiment.
Measurement of Psycho-galvanic Reflex.
Interview.

IV. Practical Exercises in the application of Psychological and Educational (including instructional) Tests.

Practical Exercises in the preparation of Case Studies and in the technique of educational and vocational guidance. Practical Exercises in the preparation of Progress Record Card and its uses.

Note :—All experiments shall be done by the candidates themselves. Each candidate will maintain a record of experimental work done by him.

PAPER III—*Methodology of Special Subjects*

1. Candidates must take two subjects in this paper, of which one shall be a Language or Science or a Basic Craft.

2. Candidates must in consultation with their tutors write two essays each on any aspect of the courses in special subjects chosen by them, embodying the result of their study and experience.

3. Candidates must complete three assignments of a practical nature in each special subject, e.g. preparation of detailed teaching syllabuses, schemes of work, charts, maps, diagrams, teaching devices, aids, etc.

4. Aims and objects of teaching the subjects with their special bearing on the aims of education as a whole ; special equipment and aids for teaching the subjects and use of material and opportunities available in the environment; special methods of teaching the subjects; review of experimental work done in regard to teaching of the subjects, correlation with other subjects; methods of testing and recording achievements ; preparation of syllabuses, schemes of work and organisation of extra curricular activities connected with the subjects; use of libraries ; field and practical work.

PAPER IV—*School Organization and Hygiene*

(i) *School Organisation* :

Organisation and administration of secondary education in C.P. & Berar.

The teacher: his academic and professional preparation.

Selection of teachers.

Internal organisation of the School.

Allocation of work and distribution of staff. General and specialist teachers.

Staff meetings, teachers' associations, educational conferences, refresher courses, Status of the teacher in society.

The curriculum and time-table.

Admission of pupils and their classification.

Class management and discipline.

Forms of punishment and reward. Self-government in schools.

Development of school tone and tradition.

Corporate life of the school: games, clubs, societies, extra-curricular activities, co-operation between home and school. Progress reports: parent-teacher associations; school functions.

Hostel management and social life.

Tests and examination. Grading of pupils. New trends in promotion technique.

Segregate, mixed and co-educational schools.

School buildings and equipment.

Furniture, apparatus, libraries, laboratories, workshops, museums, play grounds, gymnasium, swimming pool.

The school office and records.

(ii) *Hygiene*:—An outline study of the human body with particular reference to the physiological growth and development during periods of school life:—

(i) Skeletal System.
(ii) Circulatory and absorptive system.
(iii) Excretory system.
(iv) Subcutaneous system.
(v) Respiratory system.
(vi) Muscular system.
(vii) Special senses.
(viii) Nervous system.
(ix) Digestive system.
(x) Reproductive system.

Care of the various organs of the body; the importance of correct postures; the value of physical exercises and games; the need of correct furniture and good equipment; the problem of fatigue, mental and physical in relation to lessons and games; proper lighting and ventila-

tion; good water supply and facilities for drinking water; the need of proper nourishment; midday meals; sanitation of the school and hostel.

Objects and methods of medical inspection; common physical defects in children; common minor ailments, their identification and treatment; infectious diseases, their symptoms, treatment and prevention, disinfection; simple casualties and first aid; school medical record.

PAPER V—*History of Education*

The paper shall have the following syllabus:—

A. A study of the following Educators:—

Plato, Rousseau, Montessori, Dewey.

B. A Study of the development of education in India during the 20th century.

The following topics should be studied:—

(i) Primary education.

(ii) Secondary education.

(iii) University education.

(iv) Professional and Technical education.

(v) Women's education.

(vi) Social education.

18. *Poona University* The ordinances and regulations of the Poona University regarding the B.T. degree are the same as those given above under the Bombay University.

19. *Saugor University* The ordinances and regulations of this university regarding the B.T. degree are given below:—

The examination shall consist of two parts:—

PART I—*Written examination consisting of the following*:

(1) Principles and Practice of Education.

(2) Educational Psychology.

(3) Methods of teaching particular subjects.

(4) School organisation and Hygiene.

(5) History of Education.

PART II—*Practical Teaching.* The practical teaching of the candidates will be judged by:

(1) Their teaching during the year.

(2) A final test either (i) two lessons to be given of which one must be on English or Science or (ii) two lessons of which one shall

be on Basic Crafts and the other in mother tongue, mathematics, general science or social studies.

Besides passing the examination in Part I and Part II candidates will be required to have satisfactorily completed courses in the following at the college:

(1) Physical Training.

(2) Pedagogical Drawing.

(3) English Phonetics.

A certificate to this effect from the Principal of the College shall accompany every application for admission to the examination.

Marks and classification shall be as follows:

(Regulations on this topic are exactly the same as those of the Nagpur University given on pp. 226-7. Hence they are omitted here.)

SYLLABUS

PAPER I—*Principles and Practice of Education*

(The same as that of Paper I of the Nagpur University. *Vide* pp. 227-28.)

PAPER II—EDUCATIONAL PSYCHOLOGY

I. *Principles and Tests of Psychology*

1. Introductory: Scope of psychological study and application (illustrated). Nature of psychological data. Methods and Results.

   Experiments in Psychology (General and Illustrated).

   Limitations: in respect of results and conclusions of mathematical psychology; child guidance and analysis; educational and vocational guidance. Psychologist's Fallacy.

2. From Physiology to Psychology: "Response" in Physiology and Psychology.

   Nervous System. Higher Cortical Function and Brain Localization.

   Body-Mind Relationship.

   Physiology of Sense Organs.

3. The typical Psychological Response. Analysis of a mental process into its cognitive and orectic (Affective-Conative) States (illustrated).

4. Cognitive Organization: Principles of Cognition. Noegenetic and Anoegenetic Laws.

   Units of Cognition: I. Sensation. II. The Image.

   Organization of Cognitive Units: Perception and Movement. Apperception. Memory. Concepts. Language.

   Creative Imagination. Play. Day Dreams. Dreams.

Cognitive Errors.

5. Affective-Conative Organization: The Bases of Human Behaviour. Behaviour "Spread".

6. Organization of Instinctive bases of behaviour with each other and with environment; Emotions. Sentiments.

   Psychology of Need and Press.

7. Personality.

   The Final Mental Organization: "Style of Life". Philosophy of life.

   The will.

   Constitution. Heredity. Inheritance of Human Traits.

   Temperament. The Endocrine Glands.

   The Ideal Personality.

   Personality Differences. Abnormalities of Personality.

8. Formation and Development of Complexes. "Complex thinking".

   Mental Conflict. Repression. Suppression. Sublimation. Suggestion and Hypnosis.

   Psychology of the Unconscious.

9. Principles and stages and Mental Development. Processes, Maturation and Growth through Activity. Immaturity—Physical, emotional, and social.

II. *Psychology of Individual Differences*

1. Measurement of Individual Differences in abilities and Aptitudes.

   Mental Subnormality. Educational Backwardness.

   Educational and social aspects of Mental Deficiency.

2. Assessment of Personality. Code of Conduct. Attitudes and Interests.

   Abnormalities of Character and Temperament.

   Psychology of Learning and Teaching.

3. Learning at Reflex and Habit levels. Trial and Error. Learning by "insight".

   Laws of Learning. Learning Methods. Significance of "gestalt theories" for learning and teaching.

   Practice and Fatigue. Remembering and Forgetting.

   Memory Training. Transfer of Training, and School Discipline.

   Role of 'Inhibition' in learning activity.

   Motivation in Learning. Incentives.

   Attention and Interest.

   Limitations and Errors of Observation.

4. Instructional Tests and Testing.
   Diagnostic and Remedial Teaching Methods.
   Moral and Religious Education.
5. Habit Formation and Character Building.
   Principles of Re-education. Guidance and Analysis. Case Study. Mental and Social Hygiene of School Children.
6. School and Community psychological and social services.

III. *Experimental Psychology*

(Same as that of *Experimental Psychology* in Paper II of Nagpur University. *Vide* pp. 228-9.)

PAPER III—METHODOLOGY OF SPECIAL SUBJECTS

(Same as in Nagpur. *Vide* p. 229.)

PAPER IV—SCHOOL ORGANIZATION AND HYGIENE

(Same as in Nagpur. *Vide* pp. 229-31.)

PAPER V—HISTORY OF EDUCATION

A. Study of the following educators :—
   Plato, Rousseau, Montessori, Dewey.
B. Study of the Development of education in India during the 20th century.

   The following topics should be studied :

   (*a*) (i) Primary Education.
   (ii) Secondary Education.
   (iii) University Education.
   (iv) Professional and Technical Education.
   (v) Women's Education.
   (vi) Adult Education.

   (*b*) Control and Management of education. Financing of Education. Relations of the Central Government with the Provincial Government in regard to educational policy and control.

   (c) Characteristic features of tendencies in present-day education in India with comparative reference to contemporary education in England, U.S.A. and Soviet Russia.

20. *S.N.D.T. Indian Women's University* : The ordinances and regulations of this university on the subject of the B.T. Examination are given below : —

1. The candidate must have passed the G.A. Degree examination of this University or the B.A. Degree examination of any Statutory University or any other examination recognised for that purpose

by the Syndicate and, in addition, must, *after graduation*, have served for at least two years on the staff of a high school recognised for that purpose by the Syndicate to the satisfaction of the Headmaster of such a high school.

If a candidate undergoes a regular course of training in special classes recognized for the purpose by the Syndicate for a period of at least one academical year, she shall be allowed to appear for Part I of the examination and for Part II after she has served for at least 100 days, as a regular full-time teacher, on the staff of a High School, recognized for the purpose by the Syndicate to the satisfaction of the Head of such a High School.

The candidate wishing to appear for the Examination for the Degree of the Bachelor of Teaching shall register her name by paying Rs. 15, one year and six months previous to the date of her appearing for the same, i.e. on or before the 1st of September.

2. The candidate shall be required to pass an examination in two Parts as follows in accordance with the following regulations.

   Part I—Written Examination.

   Part II—Practical Examination.

3. The examination in Part I and in Part II shall be held in March and April on such dates as may be fixed by the Syndicate. Candidates may appear for both Parts in one and the same year and those who pass in any one of the Parts shall be allowed to appear for the remaining Part at an examination held in any of the subsequent years.

4. Candidates who wish to appear for Part I, Part II or both shall apply to the Registrar on or before the 31st of January and shall forward a fee of Rs. 37-8-0 for each of the Parts.

5. Failure to pass in either of the Parts shall not disqualify the candidate from appearing again for the examination held in a subsequent year provided a fresh fee is paid.

6. Candidates shall obtain 40 per cent of the total number of marks in each of the papers prescribed for Part I and shall obtain 50 per cent of the total number of marks for Part II in order to pass the examination. Candidates who will obtain 60 per cent of the total marks in both the parts taken together shall be declared to have passed the examination in the First Class.

7. The Examination fees, once paid, shall not be refunded except in the circumstances and to the extent mentioned below:—

   (*a*) Where the candidate dies prior to the examination, the entire fee, excluding the registration fee, if any, shall be refunded.

   (*b*) The entire fee, excluding the registration fee, if any, may be refunded or held in reserve, at the discretion of the Syndicate, in case of examinations for the P.A. and B.T. Degrees, provided

that an application for refund is made at least seven days before the date of the examination, and good and sufficient reason is shown for the same.

(c) Where a candidate is suddenly taken ill and prevented from appearing at the examination and sends an application for refund supported by a Certificate signed by a Registered Medical Practitioner so as to reach the University Office 24 hours before the commencement of the examination, one-half of the examination fee, excluding the registration fee, if any, shall be refunded.

N.B.—Registration fee shall not be refunded in any case.

SYLLABUS

The examination for the Degree of the Bachelor of Teaching shall consist of two parts:

Part I—Written Examination.

Part II—Practical Examination.

In Part I, the candidate shall be examined in the following subjects:

Part I

Five Papers—Three hours each—100 Marks each.

1. *Principles of Education*

The study of the fundamentals of educational theory in its social, ethical, philosophical and psychological aspects.

2. *History of Education*

This includes the history of European education beginning from Rousseau and the history of Indian education, ancient and modern. History of education should be regarded as a history of the evolution of educational ideals and the systems which they were (or are) embodied.

3. *The Practice of Education (General Methods)*

General Methods, school and class management and hygiene.

4. *Practice of Education (Special Methods)*

Special methods of teaching the three subjects chosen by the candidate.

5. *Recent Developments in Education*

The problems of education that are due to modern conditions in India and Europe, and the experiments that are undertaken to solve these problems.

PART II

In Part II—Practical Examination—the candidate's ability to hold the interest of a class and her skill in teaching will be tested.

(A) Candidates shall have to give thirty lessons (16 in the principal subject and 7 in each of the subsidiary subjects) under the supervision of a Master of Method recognised for that purpose by the Syndicate. They shall keep a Diary of Demonstrations attended, lessons witnessed and given. They shall have a Journal containing notes of lessons given and the comments on those lessons made by a Master of Method. The Diary and the Journal shall be sent to the Registrar together with her application. The Registrar shall forward the same to the examiners and the candidate shall be allowed to appear for Part II only if the examiners, after seeing the year's record, are satisfied with the year's work. Marks out of 200 shall be given for the work done during the year. Examiners will be guided in this by the report of the Master of Method and by their own inspection of the Diary and the Journal.

(B) Candidates shall give three lessons, one in each of the subjects they offer. Marks shall be assigned to the lessons out of a total of 300 marks. The subjects shall be selected from the following: —

(*a*) English; (*b*) A Modern Indian Language (Mother-Tongue); (*c*) A Classical Language; (*d*) Mathematics; (*e*) History; (*f*) Geography; (*g*) Science.

Out of the three selected subjects, one shall be the principal subject which the candidate must be able to teach to any standard of the secondary school. The remaining two subjects shall be subsidiary and the candidate shall be expected to teach them to any class only upto the fourth standard of the secondary school.

21. *Travancore University*: The ordinances and regulations of this university regarding the B.T. degree are given below: —

1. The course shall include: —

(i) A. General Principles of Education.
B. Educational Psychology.
C. General Methods.
D. School Organisation and Hygiene.

E. Methods appropriate to the teaching of two of the following subjects: —

(*a*) An Indian Language.

(*b*) English.

(*c*) Mathematics.

(*d*) Physical Science.

(*e*) Natural Science.

(*f*) History.

(*g*) Geography.

(*h*) Domestic Science.

(*i*) Music.

In place of one of the above subjects under E, a candidate may offer Child Education.

In connection with each of the subjects detailed under E, a special unit of study shall be specified each year for more intensive treatment.

(ii) Practical training, including observation and practice in teaching, the making of teaching equipment and school organisation.

(iii) Candidates shall also undergo courses in (*a*) Physical Education, (*b*) Art or Music or Crafts as prescribed by the College.

Hours of Work:—

A.	General Principles of Education	30	per annum.
B.	Educational Psychology	60	do.
C.	General Methods	45	do.
D.	School Organisation and Hygiene	45	do.
E.	Special Methods of Teaching (2 subjects)	120	do.
F.	Physical Education	60	do.
G.	Art, Music or Crafts	60	do.
H.	Practical Training (including the giving of not less than 20 lessons by each student)	300	do.
	Total	720	

Note:—Students should be required to undertake some subject as indicated under G during the B.T. course and mention of this should find a place in the College Diploma. Extra time should be found for this and the aim of such courses should be to develop interest and capacity rather than to turn off technically qualified teachers in these subjects. Making of teaching equipment in connection with the Special Methods syllabuses should be insisted upon.

2. Scheme of Examination :

Written Examination.

	Hours.	*Marks.*
(i) Theory of Education A., B. (This paper shall consist of two questions under A and four questions under B.)	3	100
(ii) General Methods (C)	2	75
(iii) School Organisation and Hygiene (D)	2	75
(iv) Methods of teaching (E) Optional Subjects:— *Two* of the following [As per list under Section 3(i) E above]	3 each	100 each
Total		450

Eligibility for a pass :

No candidate shall be admitted to the B.T. Degree unless he has passed the Written Examination and unless his practical work has been declared satisfactory by the Principal of the College.

Provided, however, that a candidate who fails in the Written Examination but whose practical work has been declared satisfactory shall be required to appear again for the Written Examinations only and provided also that a candidate who passes the Written Examination but whose record of practical work has not been satisfactory shall be required to undergo a further course of training in the College for one term and secure a record of satisfactory practical work.

Note :—Candidates whose record of practical work has not been satisfactory but who have passed the Written Examination for the B.T. Degree may however be granted exemption from attendance in the Training College for a further period of one term as prescribed above if they have been continuously working as Teachers in recognised schools since appearing for the B.T. Degree Examination. Such candidates shall be required to pass the Practical Test in the teaching of the two optional subjects arranged by the University. The fee for the Practical Test shall be Rs. 5.

4. A candidate shall be declared to have passed the Written Examination if he obtains (i) not less than 35 per cent in each of the five papers and (ii) not less than 40 per cent in the five papers taken together. All other candidates shall be deemed to have failed in the examination.

5. Of the successful candidates those who obtain not less than 60 per cent of the total marks shall be placed in the first class and those who obtain not less than 50 per cent of the total marks shall be placed

in the second class. The remaining successful candidates shall be placed in the third class. Successful candidates who obtain not less than 60 per cent of the marks in a paper relating to 4 (Methods of Teaching) shall be declared to have obtained distinction in the subject.

A. GENERAL PRINCIPLES OF EDUCATION.

(1) The approach to Education: Historical—Outlines of ideals and practice in Ancient, Medieval and Modern times.

(2) The approach of Education: Scientific—Need for the aid of Biology, Physiology, Psychology, Sociology, Logic and Statistics.

(3) *Aims of Education and their evaluation*: Livelihood; Learning; Social efficiency; Character; Leisure.

(4) *The Educative Process*:

A. (i) as the Sharing of Traditions or Social Heredity.

(ii) as the achievement of many-sided interest.

(iii) as adjustment between the individual and his environment.

B. (i) *The nature of the Environment*: The world of Nature, the world of Men, the world of Values.

(ii) *The nature of the Individual*: Need for the study of general development of body, intellect, skill, character, sociability, taste. The problem of Individual Differences.

C. *Consequent Problems*:

(i) Child and Subject: Learning and Teaching: Individual and Society (School, Home, State).

(ii) The problem of the Curriculum. What to learn and teach.

(iii) The problem of Method. How to learn and teach.

(5) *Aspects of the Curriculum*:

(*a*) Dependence upon aim.

(*b*) Theory of Formal Discipline.

(*c*) Knowledge and experience.

(*d*) Instrumental subjects—Reading, Writing, Arithmetic.

(*e*) The place of Physical activities, Handwork, Art, Music, Literature, History, Geography, Mathematics, Science.

(*f*) Integration of the Curriculum.

(*g*) The problem of pre-vocational and vocational training.

(6) *Aspects of Method*:

(*a*) Child and Class Play and Work.

(*b*) Theories underlying some modern methods, e.g. The Montessori Method, the Dalton Plan, the Project Method, the Winnetka Plan, the Decroly Class.

B. EDUCATIONAL PSYCHOLOGY.

1. *Introduction.*—What is Psychology? Relation to Educational Psychology. Educational Psychology—its scope and methods.

2. Basic Factors.—The Psycho-Physical Organism. Physiological basis of mental life, including the nervous and glandular systems, the senses, the sensori—motor arc. Human behaviour, variable and non-variable—stimulus and response—Conditioning, Heredity and Environment. The Problem of Consciousness—The three aspects of mental life, cognitive, affective, conative. Instinct and Intelligence.

3. *Knowledge and Learning*—The training of the senses—Methods of sense-training. The Montessori Method. The study of cognition—sensation, perception, conception, apperception, memory association, imagination, judgment, thinking, reasoning. Attention, interest and effort. The Laws of Learning—Remembering and Forgetting—the transfer of training—Fatigue. Stages of mental development. The General Nature of Knowledge—the stages in the growth of knowledge—place of language in the growth of knowledge—observation, classification, definition, explanation—Psychology of the Herbartian steps.

4. *The Growth of Character*—Instincts, their structure and classification—Instinctive Behaviour and its modification. The importance of Play. Imitation and Suggestion. Feelings, emotion and sentiments—The unification of personality. Habits, will and character. The Group Mind. The Unconscious in Education. Mental Conflicts, the problem of Discipline. Stages of development.

5. Individual Differences due to heredity, environment, sex, capacity and growth.

6. *Some Practical Applications*—Intelligence—its nature and measurement. Educational Tests—their uses and value. Care of the gifted and the dull, the difficult and the physically handicapped. How to study—The laws of Learning illustrated by reference to Handwriting, Reading, Arithmetic, Spelling, History and Poetry. Learning Curves.

C. GENERAL METHODS.

Teaching—Aims—Maxims of method—Lesson planning and notes of lessons.

Types of Lessons—Determined by aim—Inductive—Deductive—Drill—Review by Lecture—Appreciation—Discussion—Laboratory—Demonstration—Heurism—Supervised Study.

Teaching Aids and Devices—Assignments—Questions—Answers—Exposition—Illustration—(verbal—concrete)—Black-board—Text Books—Home-work. Note-books, etc.

Classification of pupils—Measuring Devices—Tests—Marking—Examinations (essay type and new type)—Promotions.

Class Management—Economy of Time—Securing and maintaining attention—Influence of Teacher—Typical Problems.

Discipline—Changing conceptions of school discipline—Typical problems—Direct Control (Curative)—Indirect Control (Preventive) Rewards and Punishments.

Moral Education—Direct and indirect ways of moral education. Ethical—Social appreciation—Aesthetic appreciation.

Modern Tendencies—Individual and Class Teaching—Experiments in "Adjustment to individual differences" and "Socialisation" such as Dalton Plan—Project Method.

D. SCHOOL ORGANISATION AND SCHOOL HYGIENE.

Material Conditions—Site—Building—Rooms—Lighting—Ventilation—Furniture—Play Ground—Garden—Sanitary Arrangements.

Management — Staff-meeting — Time-table — Libraries — Museum—Co-operation between School and Home—School Office and Records.

School Life—Corporate life—School Assembly—Clubs and Societies—Hobbies—Self-Government—Games—Scouting—Excursions—School Magazines—Exhibitions—School Celebrations.

Hostel—Location—Supervision—Sanitation—Equipment—Traditions.

Staff—The Headmaster and his duties—Class teacher *v.* Subject teacher and his relation to others—Inspection—Professional etiquette—Professional Organisation.

HYGIENE—

(*a*) Children's diet—Cleanliness of food—Feeding of School children.

(*b*) Clothing—Use and characteristics of good clothing.

(*c*) Cleanliness—Relation to health.

(*d*) Fatigue—Mental and Physical.

(*e*) The senses and their training—Defects of vision—Common eye diseases—Causes, signs and prevention of defective hearing and ear diseases.

(*f*) Training the child in the practice of Hygiene.

(*g*) Physical Education.

(*h*) The question of Sex Education.

(*i*) Medical Inspection—School Clinics.

(*j*) Common ailments.

(*k*) Infectious diseases—Symptoms, treatment, isolation.

(*l*) Temperance.

(*m*) School Buildings and surroundings. Furniture and Equipment —Posture.

(*n*) First aid in minor injuries.

(*o*) Health Legislation affecting schools.

E—SPECIAL METHODS

(Detailed syllabuses are omitted here.)

SYLLABUS IN ARTS COURSE.

Drawing.

Theory—General Lectures.

1. The Art Drawing and Painting.
2. The Aims and values of teaching Drawing and Painting.
3. Natural and artificial sides of drawing.
4. Materials and appliances used for drawing, and how to use them.
5. Theory of geometrical drawing and perspectives.
6. Free Arm and Ambi-dextrous drawing.
7. The place of free arm drawing in schools.
8. The art of monochrome shading and painting.
9. Drawing in correlation with other subjects in schools.
10. A comparative study of the works of different schools of art.

Practice.

I. *Free Arm Drawing on Black-Board.*

(*a*) Copying from picture-cards and charts of animals, birds, insects, etc.

(*b*) Illustrating stories and memory drawing.

(*c*) Exercises in rapid sketches, ambi-dextrous drawing of symmetrical forms and designs.

II. *Free hand Drawing in Books.*

(*a*) Drawing from flat examples.

(*b*) Birds and animals from stuffed specimens.

(*c*) Model drawing.

(*d*) Drawing from still life, etc.

III. *Shading.*

(*a*) With crayons, stumps and powder and water colour showing gradations and tone values.

(*b*) Painting foliage and scenes with natural colours.

IV. *Penmanship and Lettering.*

SYLLABUS IN CRAFTS.

1. *Theory.*

1. The place of "craft" in Education.
   - (*a*) Creative self expression.
   - (*b*) Relation between Art and Craft.
   - (*c*) The cultural view of the crafts.
   - (*d*) Considerations governing the choice of a craft and the general methods by which it should be taught.
2. Crafts in the past and present life of the community.
   - (*a*) Pre-historic man and his development—the origin of the crafts.
   - (*b*) The development of the crafts in the provision of shelter, clothing and domestic objects. Innate taste prompting artistic treatment of necessary objects.
   - (*c*) A detailed consideration of the development of the crafts.

     Architecture, Furniture, Metal work, Weaving and Embroidery, Costume. Domestic Textiles, Writing, Illumination and the printed books. Sculpture and Painting.
   - (*d*) Art and Crafts in the development of civic life.

3. Organisation and technical details, Lectures on the equipment, organisation and routine of craft classes and on tools, materials and processes to be given from time to time as a part of the practical training in each craft that is practised.

4. Craft occupations and their educational values.
5. Kindergarten occupations.
6. Vocational training and vocational guidance.
7. Leisure time occupations followed scientifically.
8. Correlation of crafts with different school subjects; how the craft training helps the teacher in teaching the school subjects.
9. Selection and treatment of local materials as media.
10. Educational Museums and Educational Exhibitions.

II. *Practical work.*

The Principal craft subjects in A and any two of the subsidiary craft subjects in B (as detailed below).

Or any three of the Craft subjects in B.

A. *Principal Craft subject*: Wood work to be taught in relation to a Project.

(i) Bench work in wood:—Fundamental exercises such as sawing, planing, smoothening, marking out, paring, boring, joining, glueing, nailing, screwing, dovetailing, inlaying, glass papering and finishing—

Tools: Such as saws, planes, chisels, gouges, gauges, squares, spoke-shaves, brace and bits, mallets, hammer, screw driver, etc.; their parts, uses and manipulation.

II. Design and construction of apparatus and appliances for use in the teaching of School subjects.

B. *Subsidiary Subjects.*

(i) *Paper and card-board work.* To fold various geometrical and other forms, simple designs to make small interesting objects by folding, crushing, squeezing, plaiting, etc. To make models of useful articles from paper and card-board by drawing and developing various designs, cutting, pasting, binding, panelling, etc.

(ii) *Book Craft,* Book-binding, sewing on tapes and corks, flexible, sewing, half and whole binding in' cloth and leather, finishing processes, lettering, blind gilt, tooling, binding periodicals and old and torn books.

(iii) *Modelling in clay or plaster.* To model natural and common objects, animals, scenery, structures involving the following exercise—Rotating, rolling, pressing, colouring, etc., illustrating lessons by means of clay and combination of other media.

(iv) Bead and wire work; use of glass, mirror, shell, dried seeds, string, cane, raffla, palmyra leaf to make decorative objects.

III. *Drawing and Design.* With special reference to the particular craft to be practised.

(i) Mechanical Drawing: Projections, Orthographical (plans, elevation, section development) oblique and isometric.

(ii) Nature, animal and figure drawing.

IV. Teaching practice to be arranged whenever possible.

SYLLABUS IN ART.

The Nature of Art.

1. The Problem of Art and Beauty.
2. The nature of Beauty.
3. Art—Beauty—Truth.
4. The Psychology of Art.
5. The use of Art.
6. Indian ideas of Art.

7. Chinese ideas of Art.
8. Western classical ideas of Art.
9. Modern Western conceptions of Art.

The History of Art.

1. Primitive Asian Architecture and Sculpture.
2. Budhist and Hindu Architecture and Sculpture.
3. Moghal Architecture and decoration and its affinities.
4. Indian influences in Asian Architecture and Sculpture.
5. The Budhist Frescoes and their Hindu successors.
6. The Rajput and Moghal miniature paintings and their Predecessors.
7. Chinese and Japanese painting.
8. Modern Indian painting.
9. The main features of Kerala Art.
10. The essentials of Eastern music.
11. The essentials of Western music.
12. The Oriental Drama.
13. The Occidental Drama.
14. Classical Western Architecture.
15. Modern Western Architecture.
16. Occidental Sculpture.
17. Classical Western painting.
18. Modern Western painting.

22. *General points for discussion*: A comparative study of the teacher-training courses provided by Indian universities for graduate teachers raises several questions of policy. The more important of these are given below and are placed before the Conference for discussion :—

(*a*) The university courses in teacher-training have been variously described as Degree, Diploma, or Certificate courses.

On what general principles should a course be described as a degree, diploma, or a certificate course ?

Should the universities award *certificates* ?

(*b*) Is the term *Licenciate in Teaching* really justifiable ?

(*c*) Should the training of undergraduate teachers be done by the University or by the Department or by both ?

If it is to be done by both the agencies, how should their activities be co-ordinated ?

(*d*) Should teaching experience for a minimum period be made obligatory before (i) admission to the course, or (ii) admission to the practical part of the examination ?

If so, what should the minimum period be ?

(*e*) Should the B.T. degree be given as an external degree ?

Should the trainees be permitted to accept service during the period of training ?

(*f*) Is any useful purpose served by short-term training courses of three months or so (as in Madras) ?

(*g*) What rules regarding physical fitness, age, and such other relevent matters (in addition to the academic qualifications and teaching experience prescribed) should be laid down for admission to a training course ?

(*h*) What measures should be adopted for the preparation and standardisation of aptitude tests for the teaching profession ?

(*i*) What justification can there be for a ban (as in Rajputana) that a student who has taken his B.A. with English only should not be admitted to the training course ?

(*j*) What is the proper adjustment between theory and practice in a training course ?

(*k*) Would it be correct to say that the present training courses are overweighted in favour of theory ?

If so, how could the burden be reduced in order to provide adequate scope for practice ?

(*l*) Would it be correct to say that the present training courses are overweighted in favour of practice ?

If so, how could the burden be reduced ?

(*m*) What is a typical training course in which a proper balance is secured between theory and practice ?

(*n*) Should the practice be continuous over a prescribed period, or should it consist of isolated lessons, or of both ?

What would be an ideal course in teaching practice ?

(*o*) What work, other than practice lessons, should be included in the practical part of the course ?

(*p*) How many marks should be assigned to the practical part ?

What percentage of marks should be assigned for the years' work in the college ?

(*q*) What modifications are necessary in the present procedure for holding the practical examination ?

(*r*) What should be the minimum standards for passing ?

(*s*) Should there be any restriction on the number of times a candidate can appear for the B.T. examination ?

It is not claimed that this is an exhaustive list; it merely indicates some of the questions on which an inter-university discussion would be worthwhile.

AMY B. H. J. RUSTOMJEE

Principal, S.T. College, Bombay.

N.B.—The syllabuses of the Universities of Utkal, Aligarh, East Punjab, Gauhati, and Srinagar have not yet been received. These will be circulated later on.

PROCEDURE FOR DISCUSSION

The President has fixed the following procedure for the discussion of the training courses for graduate teachers :—

(1) The general discussion will be initiated by *Miss Amy B. H. J. Rustomjee*, Principal, S.T. College, Bombay, who will read a paper on the subject.

(2) The subject will then be thrown open for discussion and any delegate who desires to do so may speak on any of the issues involved.

(3) At the end of the general discussion, the matter will be referred to a special committee or section which is proposed to be set up for the purpose.

(4) The Report of the committee or section shall come up for discussion and adoption before the whole conference on the last day.

MADHURI R. SHAH

Organising Secretary.

LIST OF COLLEGES IN INDIA WHICH CONDUCT A COURSE IN TEACHER-TRAINING AT THE UNIVERSITY LEVEL

(*The courses taught are given in brackets*)

---

1. Agra University

1. Women's Training College, Dayalbagh, Agra (B.T.).
2. Coronation Hindu College, Moradabad, U.P. (B.T.).

2. Aligarh University

1. Muslim University Teachers' Training College, Aligarh (B.T.; M.Ed.).

3. Allahabad University

1. University Department of Education, Allahabad (B.A. in Education; M.Ed.).

4. Andhra University

1. Government Training College, Rajahmundry (B.Ed.).
2. St. Joseph's Training College for Women, Guntur (B.Ed.).
3. Maharajah's College, Vizianagaram (B.Ed.).
4. Andhra Christian College, Guntur (B.Ed.).

5. Banaras University

1. The Department of Education, Banaras Hindu University, Banaras (B.T.; M.Ed.).

6. M. S. University of Baroda

1. Secondary Teachers' Training College, Baroda (T.D.; B.T.; M.Ed.).

7. Bombay University

1. The Indian Institute of Education, 11, Elphinstone Circle, Fort, Bombay (M.Ed.).

2. Secondary Training College, Cruickshank Road, Bombay (B.T.).
3. Ram Narain Ruia College, Dadar, Bombay (T.D.).
4. St. Xavier's College, Bombay (T.D.).

8. Calcutta University

1. Training Department, Loreto House, Calcutta (B.T.).
2. Training Department, Scottish Church College, Calcutta (B.T.).
3. David Hare Training College, Calcutta (B.T.).
4. Teachers' Training Department, Calcutta University, Calcutta (B.T).
5. Union Christian College, Berhampore, Dt. Murshidabad, Bengal (B.T.).

9. Delhi University

1. The Central Institute of Education, Probyn Road, Delhi 8 (B.T.; M.Ed.).

10. East Punjab University

1. Government Training College, Jullunder City (B.T.).
2. Brijindra College, Faridkot (B.T.).
3. Government Training College for Women, Simla (B.T.).
4. Dev Samaj College for Women, Ferozepur City (B.T.).

11. Gauhati University

1. St. Edmund's Training College, Shillong (B.T.).
2. Teachers' Training Department, Gauhati University, Gauhati (B.T. and Diploma in Geography).
3. Department of Education, Gauhati University, Gauhati (B.A. and M.A. in Education).

12. Karnatak University

1. Secondary Training College, Belgaum (B.T.; M.Ed.).
2. The Lingraj College, Belgaum (T.D.).

13. Lucknow University

1. Department of Education, Lucknow University, Lucknow (L.T.; M.Ed.).

2. Isabella Thoburn College, Lucknow (L.T.).
3. Canning College, Lucknow (L.T.).

14. Madras University

1. Lady Willingdon Training College, Triplicane, Madras 5 (B.T.).
2. Meston Training College, Royapettah, Madras 14 (B.T.; M.Ed.).
3. St. Christopher's Training College, Rendall's Road, Vepery, Madras 7 (B.T.).
4. Teachers' College, Saidapet, Madras 15 (B.T.).
5. Shri Ramkrishna Mission Vidyalaya Training College, Perianaickenpalayam, R.S., Dt. Coimbatore (B.T.).
6. Dr. Alagappa Chettiar Training College, Kariakudi, Dt. Ramnad (B.T.).
7. Government Training College, Mangalore, Dt. S. Kanara (B.T.).
8. St. Xavier's Training College, Palayamkottai, Tirunelvelly (B.T.).
9. Government Training College, Palghat, Dt. Malabar (B.T.).
10. St. Ann's Training College, Mangalore, Dt. S. Kanara (B.T.).

15. Mysore University

1. Teachers' Training College, Mysore (B.T.; M.Ed.).

16. Nagpur University

1. University Training College, Nagpur (B.T.; M.Ed.).
2. Diploma Training Institute for Men, Amraoti (Dip.T.).
3. Diploma Training Institute for Women, Amraoti (Dip.T.).

17. Osmania University

1. Training College, Osmania University, Hyderabad (B.Ed.; M.Ed.).

18. Patna University

1. Government Training College, Patna (Dip.Ed.; M.Ed.).

19. Poona University

1. The Tilak College of Education, Poona (B.T.; M.Ed.).
2. S.M.T.T. College, Kolhapur (B.T.; M.Ed.).
3. N. Wadia College, Poona (T.D.).
4. R. Gogate College, Ratnagiri (T.D.).
5. The Chatrapati Shivaji College, Satara (T.D.).

20. Rajputana University

1. Govindram Seksaria Vidya Bhawan Training College, Udaipur (B.Ed.).
2. Teachers' Training College, Bikaner (B.Ed.).

21. Saugor University

1. Prantiya Shikshana Mahavidyalaya, Jubbulpore (Dip. T.; B.T.; M.Ed.).
2. Diploma Training Institute for Women, Howabagh, Jubbulpore (Dip. T.).
3. Diploma Training Institute for Men, Khandwa (Dip.T.).

22. Srinagar University

1. Teachers' Training College, Srinagar (B.T.).

23. S.N.D.T. Indian Women's University

1. The University, Bombay (B.T.).

24. Travancore University

1. Teachers' Training College, University, Travancore (B.T.).

25. Utkal University

1. Cuttack Training College, Cuttack (Dip.Ed.).

26. Basic Education

1. Hindustani Talimi Sangha, Sevagram, Wardha.

ITEM No. 1 ON THE AGENDA

TRAINING COLLEGES IN INDIA

(*continued*)

By

Shrimati MADHURI R. SHAH

Registrar, The Indian Institute of Education, Bombay.

The total number of training colleges in India that function at the university level is 60. Brief notes on 23 of these have been given at pp. 9 to 42 of the papers circulated. Similar notes on a few more institutions are given below.

24. St. Xavier's Training College, Palamcottah (P.O.), Tinnevelly (Dt.), Madras State

This College was started in July 1950 for the purpose of supplying well-trained catholic teachers to R. C. Schools and Colleges in the Madras State. Although started for Christian students mainly, it admits students of all creeds and castes without distinction. In fact this year, the first in the history of this College, all the main creeds and denominations are represented : Hindus, Muslims and Christians.

The B.T. students are admitted in the several hostels maintained by the College. 50 per cent of the students however are day-scholars, coming from Palamcottah town itself and from Tinnevelly town close by.

This College, though located in the same compound as the St. Xavier's (Arts) College, forms a separate entity and has a Principal, staff, and administration of its own. Most of the lecturers are, however, working in the adjoining high school, St. Xavier's High School, Palamcottah, as rightly recommended by the laws of the Madras University. The management of this College is in the hands of Madura Jesuit V-Province.

The College teaches the B.T. course of the University of Madras and offers four combinations of subjects only, viz.

English and Mathematics, English and General Science, English and Social Studies, and Mathematics and General Science.

Accommodation is available for 40 men students only. Women are not admitted in accordance with the decision of the University of Madras.

Tuition Fees are charged at the rate of Rs. 50 per year for Madras students and Rs. 160 per year for students from outside the Madras State. There are no Government stipends to students.

The College has a staff of 7 members including the Principal. It has not been able to organise any research work as yet.

25. Central Institute of Education, New Delhi

Aims and Scope: The Central Institute of Education is an all-India Institution having two main functions: to conduct researches in educational problems and to offer training, particularly of an advanced nature, to teachers and other educational personnel. The Institute is affiliated to the University of Delhi. At present the following courses are being offered: —

(*a*) post-graduate teacher training course leading to the B.T. degree, and

(*b*) the higher degree course in Education leading to the M.Ed. degree.

Location: The Institute is situated on the Probyn Road in the vicinity of Delhi University.

Hostel Accommodation: By special arrangement with the University some seats have been provided in the University Hall and the Miranda House for accommodating men and women students of the Institute. They thus get opportunities to share the common university life with students belonging to other faculties and departments. The number of seats is, however, limited, about 30 seats being available for women students and 10 for men students. The hostel charges usually come up to about Rs. 60 per month (inclusive of seat-rents) for 10 months.

Fees: The tuition fee for the B.T. course is Rs. 120 and for the M.Ed. course Rs. 360 for the session. The following sessional fees are also to be paid : the University Registration fee and Annual fee of Rs. 5 and Rs. 2 respectively ; Union fee of Rs. 10 ; and locker fee of Rs. 2.

26. Dr. Alagappa Chettiar Training College, Karaikudi, Madras State

The Dr. Alagappa Chettiar Training College, Karaikudi, was started in July 1950 in response to a long-felt want recently voiced by the Education Department that colleges for the training of teachers may be started in the important regions of the Madras State. While there has been a general need for more Teachers' Colleges in the State, a College for the Districts of Tanjore, Ramanathapuram, Tiruchirapalli and Madhurai has been a long-felt necessity since the closing of the L.T. section in the St. Joseph's College, Tiruchirapalli. By way of meeting this need and also by way of implementing the suggestion of the Department, Dr. Alagappa Chettiar, the Founder of many educational institutions in South India, offered to start and equip a teachers' college in Karaikudi. The application for affiliation was made in October 1949. The University Commission visited the site of the College by the end of February 1950. The authorities having accepted the conditions laid down by the University, affiliation was granted by the University for the proposed College for a period of 3 years in the first instance. Mr. I. N. Menon, M.A., B.Litt. (Oxon.), who had for some time been the Lecturer in Education at the Teachers' College, Saidapet, and for nearly 20 years Director of Public Instruction in Cochin and Travancore, took over the principalship of the College in June 1950. The College started working on the 5th of July. Over 120 applications were received for the various courses and out of this number only 50 were selected for admission, that being the number allotted to this College by the University. The buildings of the Training College were formally declared open by C. R. Reddy, Pro-Chancellor of the Mysore University, on 27-7-1950. The following are the optional subjects provided : (1) English and Social Studies ; (2) English and Mathematics ;

(3) English and Science ; (4) Tamil and Social Studies ; (5) Tamil and Mathematics ; (6) Tamil and Science ; and (7) Mathematics and Science.

The Staff consists of 3 Professors including the Principal, 5 Lecturers and one Instructor. The work of the College is entrusted to a number of Committees such as those for Physical Education, Excursions and Visits, College Day and other Functions, Sports, Fine Arts, Audio-Visual Education, College Magazine, Scouting and Citizenship, and Discipline. In addition to these, the College Council which is a statutory body and which consists of all the members of the staff meets periodically to consider all questions relating to discipline, and organisation of curricular and extra-curricular activities.

The members of the staff are provided all facilities for pursuing research and for attending educational conferences. It is proposed to publish a series of studies on vital topics of educational and pedagogical interest in the course of the year and these will embody the research of the members of the staff. In addition to these a College Magazine has been started and it will be issued twice a year. It will include articles from the staff and leading educationists and also group studies of the trainees.

27. Union Christian Training College, Berhampore, West Bengal

This institution, the joint enterprise of seven missionary societies and churches was established with the primary object of meeting the urgent need for trained teachers in Christian Secondary Schools in Bengal, but the facilities for training are extended to students of all communities. The College is affiliated to the University of Calcutta in Teaching for the B.T. degree.

The Training College is accommodated in buildings provided by the London Missionary Society in Berhampore, Murshidabad District, on the banks of the Bhagirathi. Adequate provision has been made for sports in the grounds close by. A generous grant from the Education Department has made possible the adaptation and electrification of buildings

and the provision of necessary furniture and equipment. A good library has been provided which makes it unnecessary for students to buy more than a few text-books. Hostel accommodation is provided for men in the college buildings and for women students in a nearby building.

Staff : This consists of the Principal and three others.

B.T. Course Only a limited number of students can be admitted to the B.T. Course. The selection may be made by examination and after personal interview. A limited number of Government stipends are available for men and women students of all communities.

Fees are charged as follows : —

"(1)	Admission	Rs.	12 on admission.	
(2)	Tuition		12 a month.	
(3)	Games		4-0-0	on admission.
(4)	Fans		2-8-0	on admission.
(5)	Magazine and Common Room..	Re.	1-8-0	on admission.
(6)	Examination		1-0-0	on admission.

Hostels : Hostel accommodation is provided for both men and women students. All students, with the exception of those whose home is in Berhampore, will normally reside in one or other of the hostels provided.

Stipends : A number of Government stipends of twenty rupees a month for ten months are available for men and women.

28. St. Edmund's College, Shillong

Founded in 1916, this College with its spacious grounds and beautifully wooded surroundings, is an ideal one for the training of teachers. The school department prepares pupils for the Junior and Senior Cambridge examinations and in the University Department, in addition to B.T. course, facilities are provided for B.A., I.Sc. and I.A. examinations. Arrangements are being made for B.Sc. classes.

The College was first affiliated to Calcutta University upto I.A., I.Sc. in 1924. In 1936 the University department with

up-to-date laboratories, library and classrooms was built, and the affiliation was extended to B.A. and B.T. courses. During its connection with the Calcutta University and since its affiliation with the Gauhati University in 1947, the College frequently secured 1st or 2nd place in the University B.T. examination and a number of distinctions in educational theory and practice. The External Examiner (Cal. Univ.), Mr. A. N. Basu, now Principal, Government of India Central Institute of Education, Delhi, under date September 15th, 1950, wrote: "St. Edmund's College, Shillong, had built up a very fine tradition for its training department." Earlier the Inspector of Colleges, Calcutta University, had written:

> "This institution, situated in an extensive compound kept splendidly neat and tidy in one of the healthiest sectors of the town, with a beautiful panorama of clustering hills all round, presented to us the picture of an ideal residential College, and the internal arrangements, we must say, did not disappoint us."

The College is under the direction of the Irish Christian Brothers (founded 1801), a world-famous teaching Order who are in charge of a University (Iona College) in New York, Secondary Schools and Colleges, Technical and Agricultural Institutes, industrial and primary schools as well as institutions for the deaf and dumb in all parts of the world.

The courses taught are those prescribed by the Gauhati University for the B.T. degree. There is accommodation for about 90 students and for years every seat was filled. Now the number of students is 24. Fees are Rs. 15 per month.

The staff consists of the Principal and eight others.

College magazine, *The Edmundian,* is issued annually.

29. St. Joseph's Training College for Women, Guntur

Like the mustard seed mentioned in the Gospel, St. Joseph's Convent, Guntur, has become the abode of learning and culture for the girls of the Andhra Desa. In 1904 the first band of sisters under the leadership of the late Very Rev. Mother Stanislas arrived at Guntur and in 1904 they opened a lower elementary school with 43 pupils on the rolls and 7 in the

Orphanage. In 1926 those desiring vocational training were given an opportunity by the opening of an Industrial school for dress-making, embroidery and drawing. The Industrial school is the centre of attraction in the institution and charms the visitors with its artistic display of handicraft and occasional music which accompanies the deftness of their fingers. The year 1928-30 saw the higher elementary school rise into a complete high school offering a variety of optionals, viz. Mathematics, Chemistry, Domestic Science, Botany, History and Needle-work to suit the varying needs and tastes of pupils. The efficiency of the institution may be gauged by the results scored at the S.S.L.C. public examination and the increasing number of admissions. The present strength of the high school is 800. 1932 saw the opening of the St. Joseph's Secondary-Grade Training School for Women. 1942 witnessed the opening of a training school for the Industrial school teachers. In 1946 the summit of success was reached when this institution opened the B.Ed. College for Women and ranked as the first of its kind in the Andhra Desa, instituted purely for the training of women graduates and post-graduates for the teaching profession. The Very Rev. Mother Stanislas, the foundress of the Convent, witnessed the crown put upon the glorious work of education which she started 40 years ago in 1904 and she herself was called to her reward on the 8th of January 1947. May her soul rest in peace.

A word may be said about the college Motto of *Love, Joy and Service.* It is also the motto of the whole institution being the outcome of its tradition of five and forty years. It is good for all times but especially suitable as a perpetual ideal to mould the character of our rising generations.

The college affords instruction and practical training to women who are teachers or who intend to follow the profession of teaching. It prepares candidates for the B.Ed. degree examination of the Andhra University.

The college consists of a Collegiate Department and has attached to it a Model School containing classes I to V and Forms I to VI.

Accommodation is available for 50 students.

Only *special fees* are collected at the following rates :—

Medical fee	Re. 1 for the year
Library	Rs. 2 per term
Games	Re. 1 per term
Reading room	Rs. 2 per term
Arts and Crafts	Rs. 2 per term

Science students pay Rs. 4 per term for practicals.

This is the only training college for women in the Andhra Desa. The staff consists of the Principal and nine others.

30. Women's Training College, Dayalbagh, Agra

The College is an institution for the professional training of women teachers. It was started by the Radhasoami Education Society to fulfil the pressing need in Western Uttar Pradesh for a college devoted exclusively to the training of women as teachers.

The College was started in 1947 to prepare women for the Bachelor of Teaching Examination of the Agra University. To it are attached Teachers' Training Classes for under-graduates which are recognised by the U.P. Education Department for the T.C. Examination conducted by the Registrar, Departmental Examinations, U.P. The T.C. Classes comprise two courses, one year's course for Intermediate-passed women and two years' course for those who have passed the High School Examination of the U.P. Board or its equivalent recognised by the Board.

Staff: The College is placed under the charge of a Principal who is assisted by a competent staff of 9 full-time and one part-time lecturers.

The College now possesses a library consisting of more than 2,500 books. The reading room subscribes to a number of dailies, weeklies and monthly magazines of general, academic and educational interest, and the use of these by the students is specially encouraged by allotment of particular timings for the purpose.

The College maintains a hostel in a rented block of buildings close to it, and is in the charge of a senior member of the

staff assisted by an elderly resident superintendent. The common mess is run by the hostellers themselves.

A special experiment conducted by the College this year is the assumption of full charge of classes borrowed for limited periods from the practising school. These are entrusted to a committee of practising students who not only plan out with the assistance of their professors and class teachers the syllabus to be covered during the period and the time-table of teaching, but also look to the discipline and the general management of this 'miniature school'. This gives the pupil teachers a practical training in school management also. This experiment has been in progress for a few months only and the results are being closely watched for the further development of the idea.

31. Brijindra College, Faridkot

There are two training classes in the Training Department of this College, one meant for the training of Graduates and Post-graduates and the other for the training of Matriculates in the Drawing and Arts line. The former is called B.T. Class and training is imparted to the students to prepare themselves for the Bachelor of Teaching Degree Examination of the East Punjab University to which this class is affiliated. The latter is called Drawing Masters' Training Class in which students are prepared for the Departmental Drawing Masters' Diploma Examination. There are sixty seats in the B.T. Class and forty seats in the Drawing Masters' Class. The Training Department of Faridkot has been giving a lead in university results to other training colleges in the East Punjab. Both last year and the year before, a student of this college stood first in the province both in the theory and in teaching skill.

This Training Department of the College satisfies the needs of Pepsu (Patiala and East Punjab States Union) and the Punjab. It is a co-educational Institute with all special facilities for the girl students.

The Training Department has got a separate Hostel approved by the University accommodating students of both the B.T. and Drawing Masters' Classes.

There are ample facilities for giving all-round education to the trainees—providing them opportunities of not only mental development but also physical development by taking part in games, etc. for which there are elaborate arrangements of playgrounds. The College has a beautiful stadium which cost the erstwhile Faridkot Government several lakhs of rupees. In addition to the games, sports, gymnastics in which the students participate in the College—they are also sent for Scoutmasters' Training at Camp Tara Devi (near Simla). Moreover, the Trainees are also sent out on educational trips to important historical places like Delhi, Agra, etc.

32. Andhra Christian College, Guntur, South India

The college started the Department of Education in July 1950. It is affiliated to the Andhra University and follows the courses recommended by it. Courses in Educational Psychology, Aims of Education and Administration, Basic Education, and General Methods, as well as Special Methods in English, Telugu, Science, Mathematics and Social Studies are available. Courses in non-examination subjects such as Citizenship and Health Education, Physical Education and Methods of Teaching Morals are also given.

Accommodation for 75 students is available. This year the college has 72 students. No fees except the special fees amounting to Rs. 39 per year are charged.

No research work is done. The Department proposes to organise an Institute for all secondary teachers in the Guntur area to be held in June 1951. The Department has qualified and experienced staff.

The Department has its own model school but also seeks co-operation of the local schools for practicals.

33. Sri Ramakrishna Mission Vidyalaya Teachers' Training College, Perianaickenpalayam R.S., Coimbatore Dt.

The Vidyalaya is one of the branch centres of the Sri Ramakrishna Mission. The Teachers' Training College is one of the institutions conducted in the Sri Ramakrishna Mission Vidyalaya along with a Residential High School, Residential

Training School, a Graduates' Training Centre in Basic Education, an Industrial Section and a Rural Service Centre. On the 1st of February 1950, under the presidency of Sachivottama C. P. Ramaswami Ayyar, Srimath Swami Kailashananda laid the foundations of the Teachers' Training College Buildings. The institution was formally opened on the 6th of July by Sri Ariyanayagam of the Hindustan Talimi Sangh, under the presidentship of the Hon'ble Mr. K. Madhava Menon, Education Minister.

Courses taught: B.T. Degree Examination of the Madras University.

No. of students for whom accommodation is available 50.

Fees No tuition fee is charged; only fees for reading room, games, arts, crafts, excursions, etc. are collected. (Rs. 30 for the whole year.)

Special features or activities undertaken by the College (in greater detail): The Institution has before it the ideals preached and lived by Sri Ramakrishna Paramahamsa, Swami Vivekananda and Mahatma Gandhi. No work is considered low or high. All work is planned, shared and managed by the students themselves. The teaching of the contents of Hindu Religion and the methods of Teaching the same are a special feature of the institution. The college is residential. The staff consists of the Principal and seven others.

34. Diploma Training Institute for Men, Khandwa

Khandwa is situated on the junction of G.I.P. main line and is easily approachable from all parts of the Province. Distance therefore does not matter even to those coming from far-off places in the Chhattisgarh Division. The climate is healthy and the water supply is fairly adequate. The building and premises are electrified. The barracks are in the open place outside the town and yet not very far from it.

This Institute was started in the year 1946 under the Post-War Reconstruction Scheme. The maximum number of students receiving training per year has been 128 so far. This year, only 62 students are on roll, as an economic measure,

and as such only one section is working. The Institute is housed in Military barracks, outside the town and has no building of its own. The subjects taught are: (*a*) General methods, (*b*) Psychology, (*c*) School Organisation, (*d*) Hygiene, and (*e*) Special Methods of Teaching: (i) English, (ii) Basic Craft, (iii) Hindi and Urdu, (iv) History, (v) Civics, (vi) Geography, (vii) General Science, (viii) Mathematics, (ix) Music, (x) Drawing and Painting, and (xi) Weaving. This Institute comes under Saugor University.

No fee is charged. All students get stipends at the rate of Rs. 30 p.m. The staff consists of a Principal and 9 others. No research work is done.

35. The Department of Education and The Teachers' Training Department, Calcutta University

Prior to 1935, Calcutta University used to conduct the B.T. Examination of candidates sent up by colleges affiliated to it for the purpose of training of teachers of secondary schools of Bengal and Assam. In 1935, the University started its own Department for the training of teachers by organising three courses of studies, viz. (i) A course for the training of general subjects other than Geography and Science, (ii) A course for the training of teachers of Geography, and (iii) A course for the training of teachers of Science. For the first course, besides Graduate teachers a few undergraduate teachers deputed by schools were admitted every year; but for the last two courses only graduate teachers of Geography and Science were admitted. After conducting the three courses for seven years, the University started the B.T. course under its own management and arranged for giving training to about 60 students every year for five years in the main building of the University known as the Ashutosh Building. On account of lack of accommodation in the aforesaid building, the B.T. Classes were removed to a commodious building in 1948 rented for locating the classes and the hostel for the B.T. students. There are arrangements for the training of 130 teachers for the B.T. course. The accommodation was further increased when the Department of Post-graduate Studies in Education was opened in 1949.

In 1948, the University also made certain changes in the Regulations regarding introduction of 'Education' as a subject for the B.A. degree examination. The Pass Course in Education consists of three papers, viz.,

Paper I—Principles of Education.

Paper II—Educational Psychology.

Paper III—Education in India since 1835.

The Honours Course in Education for the B.A. degree comprises in addition to the above—Paper IV—New Trends in Education.

Paper V—History of Education (selected period as may be fixed by the Board of Studies in Teaching from time to time).

Paper VI—Selections from Educational Writings and Essays.

In 1948, the Regulations for M.A. and M.Sc. Examinations in Education were passed by the University and introduced in 1949, by opening the Post-graduate classes in Education. The Post-graduate course extends over a period of two years and the first batch of students admitted to the course in 1949, will appear at the aforesaid Examinations in 1951.

36. The Government Training College, Mangalore

Brief History: This College was newly started by the Government of Madras in July 1950 to provide facilities to teachers in the Kannada-speaking areas to undergo the B.T. course of the Madras University. Till now there was no Training College catering to the needs of the Kannada-speaking parts of Madras State, where the medium of instruction in the schools has been Kannada. The College was opened on 4th July 1950, and the Hon'ble Sri K. Madhava Menon, B.A., B.L., Minister for Education, Government of Madras, inaugurated the B.T. class on 19th July 1950.

Courses taught: The College is affiliated to the University of Madras for the B.T. Degree Course. Accommodation is available for 50 men students and 10 lady students.

Fees: No fees are charged for students coming from Madras State. For students from outside the State, the annual fee is Rs. 160. Government have also sanctioned the payment of stipends to students in the B.T. Class belonging to the Scheduled Classes and Backward communities at the rate of Rs. 20 a month.

The staff consists of the Principal and 8 others.

37. Government Training College, Palghat

Brief History The Government Training College, Palghat, was opened in July 1950 by the Madras Government to meet the special needs of the Malayalam area in providing graduate trained teachers for staffing the numerous high schools in the district of Malabar. Due to paucity of graduate trained teachers, many of the High Schools are carrying on their work with untrained graduates. The Government Training College, Palghat, is intended to meet the shortage of trained teachers. The college is at present housed in a part of the Government Victoria College buildings and in temporary sheds. The equipment is fairly complete. The students undergo a one-year course and sit for the Bachelor of Teaching degree of the Madras University. The first batch will be presented for the degree examination in April 1951.

Number of students for whom accommodation is available for the B.T. Course is 85. Number on the rolls of the college is 81 of whom 22 are women.

Fees: Students who belong to and are to serve in the High Schools of Madras State do not pay any tuition fees. Students who are deputed for training by the Madras Government also do not pay any tuition fees. Others pay a tuition fee of Rs. 54 per term or Rs. 160 per year. All students pay a special fee of Rs. 15-4-0 per year under various heads. In addition a sum of Rs. 10 is collected as caution deposit. This will be returned when the student leaves the college.

Special features or activities undertaken by the College: As this is the only Training College in the Madras State serving the needs of the Malayalam language, the college in future may undertake research on the teaching of Malayalam and

the preparation of various types of Malayalam tests in the various subjects.

The *staff* consists of the Principal and 10 others.

38. Government Teachers' Training College, Srinagar, Kashmir

This College was opened in September 1940, and functioned as B.T. Class attached to the Government Gandhi Memorial College, Jammu. It was transferred to Srinagar and amalgamated with the Teachers' Training School, Srinagar, which was a premier institution in India for imparting training in Basic National Education. This College has grown in stature in recent years. The training of all men and women teachers for the B.T., B.E.C., S.V. and J.V. examinations has been centralised in the College. The separate training class for women teachers has also recently been placed under the supervision of this College.

The College provides *accommodation* for 45 students in the B.T. class, 100 students in the B.E.C. class and 30 students in the S.V. and J.V. classes.

A *fee* of Rs. 8 per month is charged to the non-stipendiary students in the B.T. class only. The other students pay no fees.

The *staff* consists of a Principal and 6 assistants in the B.T. section, 9 assistants for the B.E.C. class and 3 assistants for the S.V. and J.V. classes.

39. Maharajah's College, Vizianagaram

This is one of the oldest Colleges in India; but the B.Ed. course was started in this academic year only. The college is affiliated to the Andhra University. It teaches the B.Ed. course of the Andhra University and provides for the following optional courses: (*a*) English and Social Studies; (*b*) Science and Mathematics; (*c*) Mathematics and Telugu; (*d*) English and Science; and (*e*) Mathematics and English.

Accommodation The accommodation in the college is as follows:—

Course.	*No. of students.*
English and Science	22
Mathematics and English	10
Science and Mathematics	18
Mathematics and Telugu	2
English and Social Studies	22

Fees : The following is the schedule of fees for the B.Ed. course : —

Medical	Re. 1
Caution money	Rs. 25
Reading room fees	Rs. 2
Calendar fee	Re. 1
Entrance fee	Rs. 3
Paper fee	Re. 1
A. Us. Union fee	Re. 1-8
Magazine fee	Re. 1
Total	Rs. 45-8

The Staff : The College has a staff of 9 members.

40. The Nowrosjee Wadia College, Poona

This college is one of the premier colleges of Arts and Science in the State of Bombay and is conducting a T.D. Department since 1939. The object of this Department is to prepare students for the Diploma in Teaching which was instituted by the Bombay University in 1939 and which is now adopted by the University of Poona and thus to provide secondary schools with a supply of trained and competent teachers.

The T.D. Department has an up-to-date library. Some of the most important and up-to-date books have been kept separately in the T.D. class-room and students are encouraged to read these and to write essays on educational topics based on material taken from these books. Useful Project Work

is encouraged and set to every student individually. Excursions and trips to different educational institutions are organised whenever possible and convenient.

All the theoretical lectures take place in the morning between 9 and 11 a.m. and those students who have to give their Practical Lessons in the different Practising Schools start their work from 3 o'clock in the afternoon. This arrangement has been found to be very satisfactory. Practice Lessons are supervised by the Professors of the T.D. Department. Besides, Demonstration Lessons in the subjects selected by the students are frequently given by the members of the T.D. Staff.

The Modern High School, Poona, The Ornellas' High School, Poona, The Sirdar Dastur Nosherwan Girls' High School, Poona, The Convent of Jesus and Mary and St. Vincent's High School are associated with this College as its Practising Schools for the practical training of the students admitted to this course.

41. Chhatrapati Shivaji College, Camp Satara

This College was started by the Rayat Shikshan Sanstha, Satara, the premier Educational body in the Province, in June 1947. It is situated in the Camp at a distance of half a mile or so from Satara City, and is housed in fine new buildings specially constructed for the College in the yard of the Phaltan Lodge, an extensive property measuring ten and a half acres of land, given as a free gift to the Sanstha by the Ruler of Phaltan State. It is a *free and residential* College for all students and especially for those coming from poorer classes of agriculturists and labourers who are taught the dignity of labour and trained in the habits of self-help—a new experiment and the only one of its kind in India. It is indeed a bold experiment which the Rayat Shikshan Sanstha is trying in the field of Higher Education; and as such, it at once constitutes a challenge to the existing system of modern education and the realisation of a dream of the greatest dreamer, Karmaveer Bhaurao Patil.

It is really a matter of pride for the institution to announce to the public that a student in this College completes his one year's course at the expense of *only two hundred rupees* or so. Part of this also can be met by the bright and deserving student to whom substantial assistance is given by the Sanstha by way of loan scholarships.

The results of the examinations of the last three years of this College are very encouraging. The T.D. classes were started from 1948 under most efficient teaching staff and the College has had 100 per cent results for the last two years. The College is affiliated to the University of Poona for three years from 1950 for teaching courses leading upto the Intermediate Arts and T.D. courses. No tuition fees are charged to students, and 30 students are admitted to the T.D. class.

Special features : The following are the special features of the College

(i) The College gives absolutely free tuition.

(ii) It is a purely residential College, and no day-students are admitted.

(iii) Students are taught the dignity of manual labour and the joy of self-help. Every student of the College has to do at least one hour physical labour such as farming, levelling, digging, tilling, sweeping, carrying sand, crushing stones, preparing bricks, helping building constructions, reinforced concrete works, every day. Students are encouraged to pay their way by manual labour. The idea of depending upon the financial help from parents or charity is deprecated.

(iv) The parent body of this college is Rayat Shikshan Sanstha, Satara. It is a big educational society. It has spread its activities throughout Maharashtra and especially in the Districts of Satara, North and South. It conducts 580 Voluntary Marathi Primary Schools, more than 25 Secondary Schools, 3 Training Colleges for Men and Women, 12 Hostels and one Arts College. 26,000 students are studying in these institutions and nearly 700 Teachers are working in these institutions.

All education in these institutions is imparted free, as far as possible. The Sanstha has to spend Rs. 10 lakhs annually over these institutions. Karmaveer Bhaurao Patil, the founder of the Rayat Shikshan Sanstha, is a great revolutionary in the field of Education. His ambition is to start Mahatma Gandhi University in the near future. To him all these institutions owe their existence.

42. Government Training College for Teachers, Jullundur City

Before the partition of the Punjab, the Punjab Government was maintaining one Training College for Men and one for Women. Both these colleges were in Lahore. At the time of the partition, the East Punjab Government decided to have a training college for graduate men teachers in Jullundur and another for women at Simla.

This college which is intended for men teachers is housed in a portion of the building of the Government High School. The number of sections in the high school was reduced and the accommodation thus released was placed at the disposal of the Training College. Luckily for the new State of the Punjab, as many as five very experienced and very senior teachers of the Central Training College, Lahore, opted for India and formed a very good nucleus of organisers, who set themselves to work to recapture the standards attained by the Central Training College, Lahore, under a succession of principals of outstanding ability. Mr. G. C. Chatterji, M.A. (Cantab.), I.E.S., who is now a member of the Union Public Service Commission, was the first Director of Public Instruction and Education Secretary of the new State of the Punjab and under his guidance and direction, the college started upon a career of service to the cause of teacher-training. Professor J. B. Seth, M.A. (Cantab.), I.E.S., was appointed as the first principal. The college started functioning in December 1947, and when the Punjab (India) decided to have a University of its own, the college was affiliated to the new University.

Courses : Only graduates are eligible for admission to the B.T. course. There is no provision for the training of junior

men-teachers, though the training college for women at Simla has provision for training junior women-teachers. That is a two-years' course and matriculates are eligible for admission. This Training College prepares students for the B.T. examination of the Punjab University. The session begins in October and terminates in the first week of July. The course includes six weeks of intensive School Practice and during this period the pupil-teachers are expected to teach in one of the practising schools under the supervision of teachers of the college.

Fees: As the college is a charge on the State revenue, only *bona fide* residents of the East Punjab are entitled to admission. Others can, however, be admitted on payment of a capitation-fee by the Government of the State to which they belong. The tuition fee is Rs. 20 per mensem. Though the college is meant primarily for men-teachers a small proportion of non-resident women students are also admitted. This year there are 35 women and 154 men on the rolls.

The College has made a beginning in research. Blue-book research on statistics, minor research in method and other educational problems has been taken in hand. Some of the problems under investigation are given below:—

(1) Educational Budgets of the different States of India.

(2) Teachers' Salaries in different States of India and in other countries.

(3) Simplified form of Punjabi Numerals and time taken by children in learning to count.

The University of the Punjab has sanctioned a research fellowship for the college on an honorarium of Rs. 130 per month and the Government have sanctioned two research fellowships of Rs. 100 per month.

Short Specialist Courses: (1) a short course in library science was held in February 1950, to acquaint teachers with the main principles of library organisation. (2) A short course on Social Education was held in May 1950. The discussions and talks held under the auspices of the Social Education Group have been printed in a small pamphlet. (3) A scheme for holding a refresher course for headmasters and senior

teachers has been sanctioned by the Punjab Government. This course will be held in March 1951.

The other pamphlets giving lists of science apparatus for High Schools and list of useful books for Science Teaching have been published.

The College organises extension lectures by educationists. Last year 8 lectures were delivered and 4 more are scheduled for the present term.

Under the direct supervision of the Principal, a *Junior Model School for Children* between the ages of five and twelve has been started in June 1949. Progressive methods of instruction are tried out in the school and the results are affording useful data for further research and experiment in the domain of education of children.

43. The Hindustani Talimi Sangha, Wardha

The Hindustani Talimi Sangha is an educational association formed to give effect in practice to the principles of Basic Education or *Nai Talim* first adumbrated by Gandhiji in 1937 and accepted by a conference of educationists at Wardha in that same year. From 1938 onwards the Sangha has been conducting its own schools in Sevagram and its neighbourhood, and also co-operating with Government Education Departments and private agencies in all parts of India, wherever asked to do so, in the introduction of Schemes of Basic Education under their auspices.

From the beginning of its history the Sangha has concerned itself with the training of teachers for basic schools as an essential part of its work. The Nai Talim Bhavan or Teacher Training Department has been conceived as a centre of research in professional problems. Since 1942 there have been regular courses for graduate teachers who have already taken the B.T. or an equivalent degree and who have had teaching experience. The great majority of the students attending these courses have been deputed by State Governments with a view to using them to staff of Basic Training Schools (for undergraduate students) in their own regions. A minority

have been deputed by private agencies or have been admitted as individuals.

Experiments are now being made with a complete course of teacher-training (equivalent to the B.T.) for young untrained graduate students, and a scheme of Teacher Education for Nai Talim on the post-graduate level is now being worked out.

44. R.P. Gogate College, Ratnagiri

The R.P. Gogate College, Ratnagiri, came into existence in 1945. It started a T.D. department from 1946 to train teachers for the Teachers' Diploma of the Bombay University and is now affiliated to the Poona University. A limited number of undergraduate pupil-teachers is admitted to the course and they receive training in Theory and Practice of Education. The average number attending the course for the last four years is 4. The results are highly satisfactory and the Department does useful work in fulfilling the need of trained teachers in middle and high schools in Konkan. The staff consists of three professors.

The fees are Rs. 75 per term *plus* gymkhana fees Rs. 12 per term.

Three local High Schools have been recognised as practising schools and the heads of these schools co-operate with the T.D. Department quite well.

45. Government Training College for Women, Shanjauli, Simla

The Government Training College for Women, joint Punjab, was started in September 1933. In 1947 when the Punjab was partitioned the Government Training College for Women was opened at Simla. The College teaches two courses: (1) Post-Graduate B.T. Course (Punjab University), and (2) Junior Secondary Teachers' Certificate (Departmental course).

The accommodation available is as follows:—

B.T.	40
J.S.T.C.—I year	25
J.S.T.C.—II year	25

Fees : B.T. Rs. 180 per annum (payable in monthly instalments of Rs. 15) and J.S.T.C. Rs. 5 a month for two years.

Special features :

(1) Excursions and hiking.

(2) Students activities :—Music, Art and Dramatic clubs.

(3) Experimental Adult Education classes twice a week.

(4) Girl guiding and camping.

(5) Staff conferences and staff study.

(6) Sports, fire drill, etc.

A Practising School is attached to this Training College but it is situated 2 miles away. As the Training College is in Simla, the vacation comes in Winter while the colleges on the planes have their vacations in Summer. This creates difficulties in connection with terms, admissions, and examinations.

46. Department of Philosophy and Education of the Lucknow University, Lucknow

I. The Education Section of the Department was inaugurated in 1944 with a *post-graduate* degree in Education called 'Bachelor of Education Science' (B.Ed.Sc.). This course comprised four papers on educational subjects and one examination in Experimental Psychology specially in relation to Education. But from the current year one more paper has been added and the degree will now be known as *Master in Education* (M.Ed.). It is a one year's course open only to those who are already graduates and hold a diploma or a degree in Education. The following papers constitute the M.Ed. course :

1. Philosophy of Education.
2. Advanced Educational Psychology.
3. Comparative Education.
4. Abnormal Psychology as Applied to Education.

5. One of the following options : —
   (1) Mental deficiency and moral amentia.
   (2) Neurosis among school children.
   (3) Deaf-mutism and speech defects.
   (4) Vocational guidance and selection.

or

Thesis.

6. Practical work.

II. In 1946 a post-graduate diploma course in Education (*L.T.*) was also started which is meant for graduates only. This is also a one-year course and is a preparatory and a qualifying course for M.Ed.

III. So far, one *Ph.D. Thesis* has been approved in Education : 'A study of the Educational Philosophies implicit in some recent Educational experiments in India '.

IV. The following short theses in education have also been approved by the Department for a Diploma in Psychology : —

1. A study in the free association of children 'between 7 and 10 years of age '.
2. How far comprehension tests are diagnostic of linguistic ability ?
3. Psychological process of learning the Roman alphabet.
4. A study in the correlation of compulsory Intermediate Science subjects.
5. A study in the correlation between school attendance and scholastic achievement and some inter-correlation between school subjects.
6. The Problem of punishment (In life in general and in Indian schools in particular).
7. Norms of linguistic achievements of over-age and under-age children : a study based on school marks.
8. Norms of attainment of over- and under-age children in Mathematics.
9. A study to find the causes of failure of boys in school.
10. Psycho-physical tests, administered on girls of different age-groups.

11. The abilities of school children in English and Mathematics—a study of correlation.

V. The following *Psychological Tests* have been standardised :—

1. A Hindustani Adjustment Inventory.
2. Adaptation of the Pressey X-O Test.
   A Clerical Aptitude Test.
4. A Colour Preference Test.

VI. At present the following subjects are being developed for *Ph.D.* in Education :—

1. Nationalisation of Education in India—L. Mukerji.
2. Aptitude Tests of School Children (9-14)—T. N. Shukla.
3. Standardisation of Intelligence Tests for age-group 12 —R. P. Gupta.
4. Psychological study of Juvenile Delinquency —(Miss) S. Sarronwala.

VII. The Department has organised a *Council of Educational Research* under the auspices of which many papers have been read, and some of which have been published. The more important among them are:

1. Some causes of maladjustment in school children.
2. The Career-Masters' Scheme—some observations.
3. Teachers' Estimate and Actual Examination.
4. Post-War Educational Development in India.
5. Technique of Mental Measurement.
6. Methods of Teaching History.
7. Life and Work of Charles Spearman—A Sketch.
8. The Place of Religion in Education.
9. A Sample Study of the Arithmetical Ability of Boys and Girls of Secondary Schools of the U.P.
10. Education in China.
11. A Hindustani Adjustment—Questionnaire.
12. Medium of Instruction in the Universities.

13. Education in Palestine.
14. The Origin, Variety and Psychological Basis of Artistic Activity.

47. St. Xavier's College (Teaching Department), Bombay

The Department was started in 1939, the same year the Statute providing for the Diploma in Teaching was passed by the University of Bombay. St. Xavier's High School, Bombay, a sister institution has been from the start its main practising school. There is no regulation of the University limiting the number of students to be admitted. The actual number of students admitted has varied in this college from year to year. The highest number reached in all these years is this year, with 76 students on the Rolls. The fees are those of the Arts Course, that is Rs. 120 per term.

The lectures are in the evening from 5-15 to 6-35 daily, except Saturday, which is reserved for discussion lessons. Practice lessons are given during the week. The staff consists of a Principal and 7 others.

48. Lingaraj College, Teaching Diploma Course, Belgaum

The T.D. Department in this College was started in June 1940. It owes its existence to the efforts of Mr. M. R. Sakhare, M.A., T.D. (London) who worked as the head of the Department till the year 1944 when Mr. L. Y. Tonnennavar, B.Sc., B.T., took over charge thereof. Dr. D. S. Karki, M.A., B.T., Ph.D., is now in charge. The Department was permanently affiliated to the Bombay University in the year 1946 and now it has come under the guidance of the Karnatak University. The class is having about 20 students on an average. There is accommodation for 30 students. It is girl students that form the majority of the class every year. The *fees* charged are :

(*a*) Admission fee	Rs. 2
(*b*) Tuition fees per term per student	Rs. 90
(*c*) Library, Magazine, Handbook, etc. per year	Rs. 10
(*d*) Gymkhana fee per year	Rs. 10
(*e*) Social Gathering Subscription	Rs. 2

G. A. High School, Belgaum, is the main practising school. St. Paul's High School, St. Joseph's Convent and Vanita Vidyalaya are also co-operating as practising schools. The staff consists of a Principal and 6 others.

49. The Indian Institute of Education, Bombay

This Institute was organised on 23rd March 1948 with the principal object of developing post-graduate teaching and research in Bombay.

M.Ed. classes The first important activity of the Institute was to open classes, with the approval of the University of Bombay, for preparing students for the M.Ed. examination of the Bombay University (entirely by papers or partly by papers and partly by thesis). In the first batch (1948-49) there were 44 students of whom 16 appeared for the examination and 14 passed. In the second batch (1949-50), there were 50 students of whom 37 appeared and 25 passed. In the third batch (1950-51), there are 60 students.

Research : Besides, the Institute helps the cause of educational research by training students for the M.Ed. (by thesis) and Ph.D. degrees of the Bombay University. 52 students are studying in this section and working at several problems.

Publications : The Institute also conducts a Publications Section. It conducts, in collaboration with the research centres in all parts of India, a quarterly Journal called the *Indian Journal of Educational Research.* This is the only journal of its type in India and is very well reviewed.

The Institute also publishes a series of books in English called *Studies in Indian Education.* The first book in the series is already published : *Problems of Educational Reconstruction* by Shri K. G. Saiyidain. Several others are in preparation.

The Institute has also organised the work of preparing good educational books in Indian languages. A beginning has been made with a book प्राचीन भारतीय विद्यापीठं in Marathi. The work will be slowly extended to other languages.

The Institute also proposes to print and sell psychological tests on a non-profit basis.

The ultimate idea of its founders is to develop the Institute on the lines of the National Society for the Study of Education in U.S.A.

Shri R. V. Parulekar, M.A., M.Ed., is the Director of the Institute. Other whole-time members of the staff are Dr. V. V. Kamat, Ph.D., the Head of the Psychology Department, Shri J. P. Naik, B.A., the Head of the Publications Department and Shrimati Madhuri R. Shah, B.A., M.Ed., the Registrar.

50. The Education Department of Gauhati University, Gauhati

Gauhati University was founded in the month of January 1948 and the Education Department began its work on the 1st September 1948 with two Readers. It then opened 3rd Year Class in Education and a year later, the 4th Year Class came into existence. The undergraduate Syllabus in Education includes Educational Psychology, Principles of Education, and History of Education (Pass and Honours). The students are all part-time students at the University. They come from the Local Cotton College (Government) and R.H. Girls' College. They offer education as one of their optional subjects.

The Post-graduate Department of Education has been opened this year. Two years' study at the Post-graduate Department of Education is required before the candidates are eligible to sit for the M.A. Degree Examination.

Last May, 26 Students from the Education Department appeared at the B.A. Examination. Of this, 11 Students received their Degree. Three of them secured distinction. During the current session, there are 45 students in the 3rd year class and 39 students in the 4th year class. Five students joined the 5th year class in Education in the New Session.

The Education Department of the Gauhati University also started B.T. Classes in the evening since January 1949. The residence requirement for the B.T. Degree course is one full

Calendar Year. Two more B.T. Classes, one at St. Edmund's College and the other at St. Mary's College, both at Shillong, are affiliated to the Gauhati University. Before the establishment of the Gauhati University, these Colleges were affiliated to the Calcutta University. The B.T. Department of the St. Mary's College is meant exclusively for the Lady Students. In January 1951, 29 candidates from St. Edmund's College, 6 candidates from St. Mary's College and 5 candidates from the Education Department of the Gauhati University will appear at the B.T. Degree Examination.

The Education Department of this University at present is following the B.T. and M.A. (Education) Syllabuses of the Calcutta University.

The staff consists of Dr. D. C. Das Gupta, M.A. (Cal.), Ed.D. (Calif.), Reader and Head of the Department and 9 others. The undergraduate students do not pay any tuition fee; but the B.T. and Post-graduate students pay a fee of Rs. 15 per month. The Gauhati University has a research journal of its own and articles on educational topics are published therein.

51. The Dev Samaj College for Women, Ferozepore

This College was founded in 1934 as an Intermediate institution. It was raised to the Degree status in 1936 and the B.T. classes were opened in 1942. J.A.V. classes were also started. Regarding the special features of the College, its Prospectus observes :

" *Staff* : The College is maintaining a very competent and highly qualified staff.

Games and Sports : The College keeps its conscience clear on the Sports side. It has regular arrangements for play. It sends out its teams to outside stations to participate in matches. Another special feature of physical activities has been the Military Training. The Officers of National Volunteer Corps very kindly train our girls in Military Drill and Rifle Training and several of them have passed the course of Rifle Training.

Hostel: The College has a very airy, commodious and spacious hostel which it has been maintaining since long.

Extra-Mural Activities: The College has made it a principle of its working to equip girls in various ways in domestic and other arts. Provision is made to teach them Music, Tailoring, Art and Drawing, Leather-Work, Cooking, Fruit Preservation, etc. The Music Classes are compulsory for I year and III year. The Leather-Work is compulsory for III year and B.T. class. Cooking classes are compulsory for III year and B.T. Fruit Preservation classes are held by the Fruit Department, Jullunder, twice a year.

Social Service Work: The College has been second to none in social service work. Besides contributing to the Red Cross Funds, the College, this time, held a variety show the entire proceeds of which were given to the Red Cross Fund. The College whole-heartedly shared in the work of social service of the Displaced Persons from Pakistan. Our College was made the Women's Centre for Social Service Work."

52. Diploma Training Institute for Men, Amravati

The Diploma Training Institute for Men, Amravati, was started by the Madhya Pradesh Government according to the Post-War Development Scheme. This Institute which imparts two-years' training to under-graduate teachers, was opened on 1st October 1946. In respect of furniture and apparatus, the Institute is self-sufficient. The library is located in a separate hall. The total number of books is 3,200 at present. The 'Open-Shelf' library which contains over 200 selected books is kept open for students every day.

Instruction is imparted according to the Dip.T. syllabus of the Nagpur University. This Institute admits a batch of 64 male teachers every year. As the training course is spread over two years, the total strength is 128. No fees are paid by the candidates; they are all Government stipendary students.

Till last year, the staff of the Institute consisted of 13 members. Five lecturers were transferred from this Institute in the beginning of the session and the Institute now has a staff

of 8 members (including one Principal, 5 Lecturers and 2 teachers) only.

53. Government Diploma Training Institute for Women, Amravati

The Government Diploma Training Institute for Women, Amravati, was opened on the 1st of October 1946.. At its commencement it used to meet in the Government Girls' High School building in the morning shift for the theoretical part of instruction. A rented building was hired from 19-10-1946 where the hostel attached to the Institute was accommodated. In this very bungalow, the Institute started imparting theoretical instruction from 2-1-1947. In July 1947, as the number of students in the hostel had increased from 28 in the year 1946 to 70, accommodation was found inadequate, so the hostel was shifted temporarily to the Government Urdu Boys' High School (now known as the Science Core High School, Amravati) Hostel building. It is still there. Theoretical part of instruction used to be imparted in the Science Core High School building in the morning till March 1950. Now the classes are held in the hostel building itself as the First Year class has been kept in abeyance. For Practice Teaching, the Pupil Teachers go to the various Girls' and Boys' schools of Amravati.

The Institute is admitted provisionally to the privileges of the Nagpur University and the Diploma-in-Teaching examinations of 1948, 1949 and 1950 have been conducted by the Nagpur University. The Institute has done well in all these Examinations. It is fully equipped with the necessary materials. What it still lacks is a building of its own and a Practising School. In addition to the subjects prescribed by the University, the Institute provides training in Spinning and Weaving, Drawing and Painting, Music and Home Science.

This Institute has a strength of 128 students. No fees are charged and all the pupil teachers receive stipends of Rs. 30 per month each.

The Institute has always prided itself in its extra-mural activities, such as Social Education, Extension Lectures,

Scouting, Hindi Literary Society and the Music Society, and Dramatisation. Each pupil teacher, during her two years' course, teaches the 3 R's to at least 2 illiterates. Kirtans, Bhajans, Small dialogues and dramas depicting the importance of literacy and sanitation are held every Saturday for the benefit of adult illiterates. These women always show great interest and once they themselves put up a show. Once a fortnight, Extension Lectures are given by great Educationists both of and outside Amravati. Sometimes lively debates on current topics are also held. The pupil teachers are tutored in Hindi compulsorily. The Institute holds its annual gathering as Education Camp, or Education Week, or Break-up Social which is celebrated for the last 4 or 5 years. During these socials, exhibitions and sales are also held. The articles prepared by the Home Science Department invariably attract a good crowd.

The staff consists of a Principal and 10 others.

54. Coronation Hindu Degree College, Moradabad (U.P.)

The College has grown up out of a Middle School of the same name established by some educationists and philanthropists of Moradabad in 1911. It became a High School in 1916, an Intermediate College in 1937 and in 1949 were started the Degree classes in a separate block of rooms. In July 1950 post-graduate classes were added.

The College prepares prospective graduates and post-graduate teachers for the B.T. degree of the Agra University. It attracts students from Eastern Punjab, Rajasthan, and all parts of Pradesh. The institution inculcates in its students a high sense of duty and a spirit of selfless service to the nation on democratic principles of life. The College played a conspicuous part in the Freedom Struggle of the Nation, and suffered displeasure of the then Government on account of the participation, by its students, in the Quit India Campaign of 1942.

At present there are 79 students in B.T. and from July next it is proposed to provide accommodation for 160 B.T. scholars. The College enjoys the amenities of good hostels and extensive playgrounds as well as an experimental and practising school.

Several other Higher Secondary Schools in the city have extended their co-operation by allowing the pupil-teachers to teach their classes. Instruction is provided in—

(*a*) Principles and Psychology of Education.

(*b*) General and Specific Methods of Teaching.

(*c*) School Organisation, Management and Hygiene.

(*d*) Western and Indian History of Education.

(*e*) Physical Training, Art and Craft, Gardening and Nature-study.

Facilities are also offered for specialisation in almost all the school subjects, Physical Education and Rural and Primary Education.

The fees charged are : Tuition Fee Rs. 21 p.m. and half-yearly fees of Rs. 15 for College Union, Games, Magazine, Library, etc. The University examination fee is Rs. 55. There are no capitation fees in the College.

The Staff consists of a Principal and 10 others.

The Education Department of the College is yet in its infancy. Its future programme includes mental testing of local school children and educational experiments in methodology. Experimental education is proposed to be started as a subject of study with a view to promote educational research. The College proposes to start the M.Ed. classes as soon as the Agra University has approved and drafted the necessary syllabus.

55. Loretto House

The Loretto House was established under the direction of the Loretto Sisters in 1842. It has four Departments. The Training Department was started in 1911 and affiliated to the Calcutta University. Formerly, it used to prepare students for the L.T. as well as the B.T. degree. The L.T. class has since been discontinued. Admission is available to 20-25 students and the fees are Rs. 30 p.m.

56. The Training Institute for Women, Hawabagh, Jubbulpore

The Training Institute for Women, Hawabagh, Jubbulpore, was founded in July 1928. In the same year it was recognised by the Government, and students were prepared for the English Trained Teachers' Certificate Examination. Successful candidates were granted the Trained Teachers' Certificate by the Department of Education of the Central Provinces. But now the Government is pleased accord sanction to the admission of the Training Institute for Women, Hawabagh, Jubbulpore, to the privileges of the University of Saugor for a period of three years with effect from the current session, in respect of courses for the Diploma in Teaching Examination. It is hoped that permanent recognition will be given within a very short time.

Admission : Candidates for admission must pass the High School Certificate Examination, or its equivalent. *A knowledge of Hindi is necessary*, because the medium of instruction is Hindi.

Course of Study The course of study as prescribed by the Board of studies of the University of Saugor is followed. Besides, the students are also given opportunities to qualify themselves in the following : —

I. Elementary or Intermediate Examination in Drawing of Bombay School of Arts.

II. Prathama and Visharad Examinations of Hindi Sahitya Sammelan, Prayag, Allahabad. Students who have studied Hindi for the matriculation examination can prepare for the Visharad examinations.

III. Those students who have not studied mathematics in the High School, but would like to qualify themselves, in that subject, can appear in mathematics according to the regulations of the High School Board of M.P.

IV. The Institute offers a Diploma in Physical Education to those who complete the prescribed course, and pass both in the practical and theory examinations conducted by the

Principal of the Institution and by the Principal of Johnson Girls' High School.

V. The Institute offers a certificate of Religious Education to those who will complete the prescribed course, and pass both in the practical and theory examination conducted by the Principal and assisted by another qualified person.

VI. Plans are under way to give training in conducting Girl Guiding and Blue Bird Flocks.

Fees are as follows :—

Admission	Rs. 5
Games	Rs. 5
Library	Rs. 5
Monthly for twelve months.	
Tuition	Rs. 8

The staff consists of a Principal and 9 others.

TRAINING COLLEGE

ITEM No. 5(a) ON THE AGENDA

M.A. or M.Sc. IN EDUCATION

The Calcutta University does not have a M.Ed. course ; but it provides for a M.A. or M.Sc. in Education. The ordinances and regulations regarding this degree are given below :—

The course in M.A. or M.Sc. in Education shall be as follows :—

Paper I: The General Principles of Education and the Development of Educational Theory	100 marks
Paper II: Educational Psychology and Educational Sociology	100
Paper III: Educational Measurements and Experimental Pedagogy	100
Paper IV: The General History of Education—	
(*a*) General (selected periods of selected countries)	50
(*b*) Ancient and Medieval India's contribution to Education	50
Paper V The Theory, History and Present State of Educational Institutions and Administration in India	100
Paper VI: One of the following special subjects—	100

(A) Comparative Education—The Educational System of some country or countries outside India approved for this purpose by the Board of Higher Studies in Education.

(B) Statistics in Education (a knowledge of Mathematics upto the B.A. or B.Sc. standard will be required from candidates taking up this special paper for his M.A. or M.Sc. degree in Education).

(C) Methodology of instruction in one of the following subjects :—

(i) Language and Literature (with special reference to Bengali or English or an Ancient or Modern Language).

(ii) History and Civics (including social science).

(iii) Geography (including elements of Geology).

(iv) Mathematics (including elements of Astronomy).

(v) Physical Sciences (Physics and Chemistry).

(vi) Biological Science (Botany, Zoology and Physiology).

A candidate will not be allowed to offer one of the subjects set forth under (C) above, or to submit a thesis dealing with the Methodology of Instruction in any subject unless he has previously taken Honours in his B.A. or B.Sc. degree or he is an M.A. or M.Sc. in that subject or in an allied subject. The Executive Committee of the relevant Council of Post-Graduate Teaching shall have power, in very special cases, to exempt a candidate from fulfilling this condition.

(D) Educational classics. One or more works as may be prescribed by the Board of Higher Studies in Education.

(E) Mental Hygiene and Child Guidance.

(F) Educational and Vocational Guidance and Industrial Psychology.

(G) Educational Organisation and Administration.

(H) Special Education.

The Syndicate shall have the power to add to or modify the above lists on the recommendation of the Board of Higher studies in Education, approved by the Executive Committee.

Practical 200 marks

(A) Every candidate will be examined on Practical Teaching and Class Management for three periods; 100 marks will be assigned for this part of the examination of which 25 marks shall be reserved for *viva-voce* examinations. The examiners will be at liberty to apply, without previous notice, any further test they may deem desirable in order to form an opinion of the candidate's competence as a teacher in the subjects which he professes or of his organising ability.

(B) Every candidate will also be examined as regards his ability to carry on or perform suitable experiments in Pedagogy and Psychological tests; 50 marks shall be assigned to this part of the Practical examination.

(C) Every candidate must produce Note-Books of his Laboratory Work and Class Teaching Work, which must be duly certified by the teacher. The Note-Books shall be examined and marked by the Examiners. 50 marks out of 200 marks assigned for Practical examination under Papers VII and VIII shall be allotted to these Note-Books.

The syllabus for each paper shall be defined by the Syndicate on the recommendation of the Board of Higher Studies on Education, approved by the Executive Committee and books shall be recommended from time to time by the Board of Higher Studies in Education to indicate generally the extent and standard of knowledge required.

A candidate who is permitted to offer a piece of research work in terms of Section 6A of these Regulations will be exempted from appearing in Paper VI and one other paper granted by the relevant authority,

carrying a total of 200 marks. The number of marks assigned to the thesis and *viva-voce* examination thereon shall be 200.

The conditions to be fulfilled by a candidate who is allowed to offer a thesis are as follows :—

(*a*) He must have completed one year's study of the M.A. or M.Sc. course in Education under University Lecturers or in a college affiliated in the subject upto the M.A. or M.Sc. standard.

(*b*) He must, at the end of the year, submit to the Board of Higher Studies in Education, an application for permission to offer a thesis in lieu of part of the examination.

(*c*) The application shall indicate the subjects and scope of the thesis he wishes to offer and must be recommended by the professor or professors under whom he has been working.

(*d*) If the application be granted by the Board of Higher Studies in Education, the thesis must be prepared under the general direction of the Professor or Professors with whom the candidate is prosecuting his studies.

(*e*) The candidate shall deliver three copies of the thesis (printed or type-written) to the Secretary to the Councils of Post-Graduate Teaching in Arts and Science at least one month before the first day of the M.A. or M.Sc. Examination at which he intends to present himself.

(*f*) The thesis shall be examined by a Board of three examiners. The name of a candidate whose thesis has been approved shall be marked with an asterisk in the list of successful candidates published in the Gazette and also in the University Calendar.

ITEM No. 5(b) ON THE AGENDA

Training of Graduate Teachers

By

Miss AMY B. H. J. RUSTOMJEE,

Principal, S.T. College, Bombay.

Of the 25 Indian Universities that provide a training course for graduate teachers, the details of 20 university courses have already been given (*vide* pp. 155-248). The courses of the remaining universities are given below.

1. *Aligarh University* : The duration of the course is one year after graduation. Some of the essential regulations are given below :—

1. The *Final Examination* comprises—
   (*a*) The Practical Examination, and
   (*b*) Six written papers, viz.
      (1) Principles of Education.
      (2) Psychology of Education.
      (3) History of Education.
      (4) General Methodology.
      (5) School Organisation and Hygiene.
      (6) Methods of Teaching School Subjects.
   (Each of three hours' duration and carrying 100 marks.)

The result of the Practical Examination will depend on :—

(*a*) The record of practice teaching done during the session.

(*b*) The record of written work submitted in the tutorial classes.

(*c*) The record of criticism lessons.

(*d*) The record of extra-curricular activities and handwork.

(*e*) The marks awarded for the two final lessons given in the presence of the Board of Examiners.

In the final estimate of a candidate's position, the departmental report based on (*a*), (*b*), (*c*), and (*d*) as well as (*e*) will be taken into consideration.

No student shall be allowed to appear at the B.T. Examination unless :—

(*a*) He has completed 75 per cent of the attendance at lectures and tutorials separately.

(*b*) has given 60 lessons in an approved practising school of the University and is certified by the Chairman as a fit person to appear at the Examination.

In the written papers the maximum marks for each paper will be 100. The following will be the percentage of marks for each division :—

Minimum Pass Marks	36 per cent
Second Class	48 per cent
First Class	60 per cent

2. *Special Subjects*: A candidate for B.T. Examination may offer one of the following special optional subjects in addition to the compulsory papers : English, Mathematics, History, Geography, Science, Urdu, Hindi, Experimental Education, and Religious Education.

He will be required to offer in addition to the six compulsory papers, a special optional paper on one of the above subjects. His failure in that paper, however, will not affect the result of his B.T. Examination.

Candidates who offer a special paper on the teaching of any subject will be required to possess a thorough knowledge of the methods of teaching it as well as of subject-matter upto the standard at least of the High School Examination. They will also be required to do the prescribed work, written and practical, in connection with it.

Candidates who take up Experimental Education as a special paper will be required to complete the experiments and the written work, prescribed in the syllabus for the subject.

The record of such written and practical work will be submitted for Examination to the Examiner of the special paper who will allot marks on it as well as on the answer paper.

3. *Practice Teaching*: Every student is required by the Statutes of the University to give at least 60 lessons before he can be sent up for the examination.

He must, in the presence of at least two examiners appointed by the Academic Council, give satisfactory evidence of his ability to manage classes. He shall give two lessons in subjects included in the curriculum of a secondary school or of an Intermediate College. In the case of graduates in Science, one of the lessons shall be a lesson in Mathematics. Nature Study, Physics, Chemistry, or Geography. In the case of specialists, one of the lessons must be in the subject which they have offered for specialisation.

Every student is required to complete the following amount of work in connection with his practice teaching :—

(1) Attendance at Demonstration and Criticism Lessons.

(2) Observation of teaching as directed.

(3) 60 Lessons delivered in schools recognised for the purpose.

(4) Attendance at tutorials for the discussion of lessons.

(5) One or more criticism lessons to be delivered in the presence of supervisors and the students of the B.T. Class.

Every candidate will be required : —

(1) to keep a record of Demonstration and Criticism Lessons observed and teaching done,

(2) to present a report on his work done during the period of teaching practice,

(3) to submit a record of any educational experiment carried out by him. This is particularly necessary for students who want to specialise in any subject,

(4) to darw up and submit a scheme of work for one term in some school subject to be selected by him,

(5) to write essays for the Tutorial Classes and take part in discussions,

(6) to enter all the required particulars in the Observation Books,

(7) to present a record of his work in Handwork and Drawing, and

(8) to submit a record of Physical Training, Drill, Scouting and Games.

Each student is required to keep a full record containing notes, illustrations, etc. of all the lessons taught by him. This Note Book may be examined by the Board of Examiners at the time of Final Examination in Practice.

SYLLABUS

Paper I: Principles of Education

1. The place and function of Education in human life.

2. Formal and Informal education, their meaning and scope of their syllabuses.

3. Aims of Education : —

(a) The relation of Educatioal aims to the life and ideals of society.

(b) Intellectual aims. Its Influence on the development of Indian Education and its limitations.

(c) Cultural aim ; Different meanings of culture, traditional conception and its limitations. The problem of the transmission and reconstruction of culture.

(*d*) Morality as an aim of Education :—Limitations of traditional conception ; its meaning and purpose ; psychological and sociological basis, the problem of moral instruction in schools.

(*e*) Adjustment as an aim of Education :—Individual and environment ; the nature and scope of the process of adjustment.

(*f*) The development of individuality as an aim of education. Its psychological and educational implications for school and society.

(*g*) The Vocational aim ; its meaning and purpose with special reference to Indian Education.

(*h*) Citizenship as an aim of Education. Its different meanings and limitations ; synthesis of the two aims of individuality and citizenship.

(*i*) Discussion of the aim of education in the existing Indian conditions.

4. Agencies of Education.

(*a*) The Agencies of Informal Education :—

(1) *Home* : Its significance and purpose as an educative agency ; its relation with school.

(2) *Community* : Its meaning and significance ; relation of the community and school ; its implications for the objectives, content, and methods of education. Socialisation of the curricular and extra-curricular activities. The Indian schools as an agency for socialisation.

(3) *State* : The relation of the State and the school in the past and the present. The scope and limitations of the relationship.

(4) *Religion* : Religion and Education in the past. Tendencies in the modern period. The problem of religious education in India.

(5) Other informal agencies and their place in education, *e.g.* the press, the radio museums, etc.

(*b*) The agencies of Formal Education :—

(1) *The School* : Its relation to other educative agencies, its characteristics as an educative environment, its scope and function ; special features of a modern progressive school. The New School for the post-war India.

(2) *Institutions for Adult Education* : Nature and scope of their work with special reference to India.

Paper II   Educational Psychology

(A) Introductory :—

1. Educational Psychology. Its scope. Its value to the teacher.

2. Methods of Psychological study and investigations applied to educational problems. Introspection, observation, experiment and psycho-analysis.

3. Structure and functions of the nervous system. Sense organs, Sensorymotor arc, Variable and non-variable human behaviour. Stimulus and response. Conditioning.

4. Experience and consciousness, Analysis of a cross-section of the mental process. The cognitive, conative and feeling-tone aspects and their relation. The unconscious.

5. The endocrine glands. Location and functions.

6. The psycho-physical organism. The nature of the mind and its relationship with the body.

7. Behaviourism, Hormic School of psychology, Marks of behaviour, Horme, mneme and cohesion.

(B) Psychology of Emotions and conation :—

1. The Raw-materials of Character :—

(*a*) Disposition,

(*b*) Temperament, and

(*c*) Temper.

(*a*) Disposition : Structure and types. Instincts. Their structure and classification. Socialisation of the individual through (i) the sublimation of instincts, (ii) the balancing of disposition, (iii) the organisation of instincts into moral and aesthetic sentiments, and (iv) through the avoidance of repression and use of other mechanisms of escape from the reality.

General Innate tendencies : Routine, Mimesis (Imitation, Suggestion, Sympathy), and Play. Study of the nature and place of each of them in the educative process. Mimesis and the behaviour of the mass.

(*b*) Temperament : Factors governing its formation, e.g. food, climate, habits of life, glandular secretions. Types of temperament as illustrated in individuals, races and sexes. Methods of modifying it and extent of modifiability.

(*c*) Temper : definition, examples. Non-modifiability of temper.

(*d*) Infinite variations of personality resulting from the permutation and combination of varieties of disposition, temperament and temper.

2. Acquired elements of character : Sentiments, Ideals, principles, habits, complexes and ideal of self.

(*a*) Sentiments : Modes of formation. Structure. Examples. Their place in the structure of character.

(*b*) Ideal of self, principles, ideals, habits. Integration of character. Strength of character and goodness of character. Will and its training.

(*c*) Complexes : Functioning and modes of expression. Influence exerted upon individual's permanent attitudes and reactions.

(C) The Learning Process :—

1. The learning process. Forms of learning. Laws of learning.
2. Transfer of training.
3. Motivation of learning.

(*a*) Attention. It's nature and types. Causes and Symptoms of inattention. Favourable conditions for securing attention. Differences between children's and adults' attention. Educational implications.

(*b*) Fatigue. Types, Symptoms, Causes. Preventive and remedial measures.

4. Techniques of effective learning as exemplified in
   (*a*) Study of book's,
   (*b*) Note-making,
   (*c*) Listening to lectures, and
   (*d*) Note taking.

(D) Congitive Functions :—

1. Sensation. Sense Training. The Montessori Method.

2. Perception. Apperception. Gestalt Psychology. Training of observation.

3. Memory : Analysis of memory function. Remembering and forgetting. Retroactive inhibition. Types of memory. Improvement of the memory function.

4. Productive Imagination : Types, Function, Imagination of Children. Experimental evidence as to improvement of Imagination, Training and educational uses.

5. Conception. Type's of concepts. Language and its relation to thought. Causes of crooked thinking, its prevention and elimination. Training in correct, clear and connected thinking.

6. Growth of cognitive structure or Intellect. Richness and organisation of intellect.

(E) Mental and Educational Measurement's :—

1. Intelligence Theories concerning its nature. Its growth and maturity, G,s and other factors.

2. Intelligence Tests. Kinds—Individual, group, performance and pre-school tests. Principles of test construction. Uses and limitations in education.

3. Tests of emotion and character traits.

4. Tests of achievement Test suitable for the measurement in various school subjects such as Reading, Spelling, Grammar, Composition, Arithmetic, etc., at primary and middle school stage's and for various high school subjects such as history, geography, science, etc.

5. Diagnostic Tests for the measurement of backwardness in various school subjects.

6. Prognostic Tests for the gifted child and for selection for higher stages of education.

7. Important statistical concepts and devices. Principle of educational test construction.

8. New-type tests and essay-type examinations—merits and demerits.

(F) Psychology of the Unconscious; and its educational bearings.

(G) Principles of Mental Hygiene.

(H) Biological Background of Education:—Laws of heredity. Part played by heredity and environment in the development of the individual.

(I) Individual Differences: Due to heredity, environment, sex, capacity and growth.

(J) Applications of Psychology to the teaching of school subjects.

(K) Stages of Development:—Plastic or nascent periods. Beginning of language, Motives, Characteristics of infancy. Evidence as to the age at which school education should begin. Later infancy. The stable period. Adolescence, its educational implications.

(L) Principles of group psychology with special reference to their applications to educational problems.

Paper III. History of Education

1. The educational system of ancient Hindus.
2. Early Muslim education in India and the Mughal System of education.
3. Education under early British rule. The East India Company accepts responsibility for the education of Indians.
4. A period of experiments (1813-33). Three schools of educational policy.
5. The birth of the modern educational system (1833-53). The Anglicist-Classicist controversy—Macaulay's Minute.
6. Educational Policy enunciated. Wood's Dispatch, 1854. Downward filtration theory.
7. Educational developments between 1854-82. The departments of Public Instruction set to work, Growth of collegiate, secondary and primary education.
8. The Hunter Commission and after (1882-1902).
9. Lord Curzon and his policy of centralisation. Indian Universities Act, 1904.
10. On the eve of diarchy, Government Resolution on educational policy, 1913. The Sadler Commission, 1917.
11. Diarchy introduction (1921-35). The Hartog Committee.

12. Provincial autonomy and post-war educational reconstruction (1935-47). Central Advisory Board revived, Wood-Abbot Report, Wardha Scheme of Basic Education and its reaction in the provinces. Sargent Report.

Paper IV: General Method

1. Different types of lessons—lessons of knowledge, skill and appreciation—and procedures suited to them, Lesson Plans.

2. Teaching Devices:—

(*a*) Exposition—Description and narration.
(*b*) Questions and Answers.
(*c*) Illustrations of various kinds as means of education.
(*d*) Aids to teaching—blackboard, gramophone magic lantern, projector, epidiascope, radio, etc. eye control, voice control, place of handword in teaching.
(*e*) Text books, their function; qualities of good text books.
(*f*) Expression and application work--its different types, e.g. oral expression, graphic expression, and concrete expression. Homework.
(*g*) Correlation of subjects and of different branches of subjects.

3. Motivation of learning with reference to the following methods of teaching.

(*a*) Inductive and deductive.
(*b*) Analytic and synthetic.
(*c*) Problem solving.
(*d*) Supervised study and the use of class libraries.
(*e*) Heuristic method.
(*f*) The lecture demonstration method.
(*g*) The Laboratory method.

4. Tests and Examinations.

5. General Principles of curriculum construction with reference to the needs of child and society.

6. Individualisation. Different plans of individualising instruction:

The Montessori Method. The Dalton Plan.

7. Socialisation: The Project Method, Active Schools. The Gary Schools.

Paper V: Educational Administration, School Organisation and School Hygiene

(A) Educational Administration:

1. General Educational Administration:—Organisation of education services, central and provincial; Functions of Universities, local bodies (District Boards, Municipal Boards, Corporations, etc.) and private agencies, and their relation with one another.

2. Classification of Schools: Organisation and administration of the educational system with special reference to the United Provinces, Nursery, Infant, Junior Basic, Senior Basic and Higher Secondary Schools; Vocational Schools; special types of schools for adults, defectives, etc. Co-educational Schools.

3. Inspectorate and School Inspection; Duties of the Inspector; Methods of Inspection; Common faults of inspection.

4. Training of teachers; critical examination of the present system and desirable lines of reform; emergency training of teachers.

(B) School Organisation:

1. The Headmaster:

(*a*) His place in the School and his duties.

(i) Administration, organisation and direction, staffing and allocation of work; specialists v. Class teachers; classification and promotion of pupils, discipline, extra-curricular activities.

(ii) General Supervision: Supervision of registration work and accounts, of teaching work, and of hostels.

(*b*) His relation with:—(i) Assistant masters, (ii) Pupils, (iii) Parents, (iv) Community, (v) Management, and (vi) The Government.

2. The Staff of the School:

(*a*) Personal qualities and equipment of the teacher.

(*b*) Functions of the teacher: (i) teaching, (ii) planning and organisation of curricular and extra-curricular activities, (iii) professional growth through study and educational experiment.

(*c*) Method of co-operation amongst the staff; staff meetings.

(*d*) Teacher's relationship with (i) Management, (ii) Headmaster, (iii) Pupils, (iv) Parents, and (v) Professional organisations.

3. School Building:

(*a*) (i) Site; (ii) Plans suited to different types of Schools rural and urban; open air schools, school garden, gymnasium, swimming pool, play-ground, rooms for special subjects; (iii) Ventilation and sanitary arrangements.

(*b*) Furniture: Different kinds of desks, black-boards, cup-boards and their uses. Furniture suited to different types of schools, (c) Equipment; (i) Books, (ii) Audiovisual aids, e.g. charts, maps, pictures, models, film projectors, epidiascope and radio, (iii) Gymnastic equipment, games material and play material for infants, (iv) special equipment for science laboratories, workshops, history, geography and mathematics room.

4. Hostels Location, sanitation and equipment in relation to physical health, organisation of corporate life in hostels; teams, their co-operation and co-operative enterprises; supervision of physical, intellectual, and moral life by house masters and the headmaster, special problems of girls' hostels.

5. Time-Table:—Factors influencing its construction; allotment of time to formal and extra-curricular activities, class-wise and teacher-wise time-tables; Games time-table; homework time-table; time-table suited to different types of schools.

6. Extra-curricular Activities:

(*a*) Functions of extra-curricular activities, (*b*) Organisation of these activities, (*c*) Kinds:—

(i) Literary—Literary, dramatic and art societies; School publications; (ii) Games and athletics; (iii) Hobbies; (iv) Clubs; (v) Boy Scouting and Girl guiding; (vi) Junior Red Cross; (vii) Co-operative Societies.

7. Corporate life or Community Spirit: Aids to its creation, *e.g.* school assembly, school hymn, badges, collective projects or joint enterprises, school celebrations, exhibition of school work.

8. Discipline:

(*a*) Kinds—(i) External discipline, (ii) Self-discipline.

(*b*) Aids to discipline:—

(i) Those which affect education through rewards and punishments (critical examination of different kinds of rewards and punishments and their effects).

(ii) Those which train the individual in self-control through self-government (*e.g.* class committees, house committees, general committees); difficulties and how they can be overcome.

(*c*) Methods of dealing with certain types of problem children, *e.g.* wilful, sulky, quick-tempered, self-complacent, apathetic and lazy.

9. Tests and Examinations: Uses of different kinds of tests for diagnosis and prognosis: grading and classification of pupils; new trends in the technique of promotion and selection for various stages of education. Tests v. the traditional type of examinations; vocational guidance and career masters.

10. Parental Co-operation: Its importance; co-operation between the home and the school through (*a*) parent-teacher associations, (*b*) progress reports, (*c*) school functions, (*d*) Old Boy's Days, etc.

11. The School and the Community: Local museums, Zoo, Botanical garden, farms and factories and their functions as supplementary informal agencies of education; community centres.

12. Library and Museum:

(i) Library: Class library, school library and teachers' professional library and their effective use.

(ii) Museum: Its imortance and equipment.

13. School records and registration, kinds of school records; mode of keeping records: Headmaster's and Assistant Masters' duties in relation to school office.

14. Health Service and Supervision: Its influence; its importance, medical inspection, systems of records and of notices to parents.

(C) School Hygiene:

I. (a) Hygiene of the School, the classroom and the surroundings, ventilation, water supply, sanitation of the school and hostel; overcrowding.

(b) Hygiene of the School Child:

I. Health and Physique of children as affected by education and school conditions, factors influencing health and growth; importance of rest, relaxation and sleep; factors causing fatigue, its prevention and remedial measures.

II. The anatomy and physiology of the human body in broad outline with special reference to the health of the school child as sketched below:—

1. The human skeleton—malformation due to wrong postures and their preventive and remedial measures.
2. Muscular system—Physical exercise; problem of fatigue.
3. Circulatory system; Haemorrhage and anemia.
4. Digestive system—Diatetics; care of the teeth; malnutrition; school meals.
5. Respiratory system—mouth and nose breathing, deep breathing exercises.
6. Excretory system—training in elimination; care of the skin.
7. Nervous system—Problem of mental fatigue and strain; causes and cure of stammering, the nervous child.
8. Special senses—Hearing and sight; defects of vision and hearing, their prevention and correction.
9. The Ductless glands and their functions.
10. Common Diseases—malaria, cholera, plague, tuberculosis, measles, small-pox, whooping cough, influenza, typhoid.

Paper VI: Methods of Teaching School Subjects

A knowledge of the methods of teaching any three of the following will be expected of all students: (1) English, (2) History, (3) Geo-

graphy, (4) Science and Nature Study, (5) Mathematics, (6) Urdu, (7) Hindi, and (8) Religion.

A general acquaintance with the following points in connection with the teaching of the selected subjects will be required: —

1. Aims and values of the subject.

2. Its correlation with other subjects.

3. Different methods of teaching the subject with special reference to modern trends.

4. Notes of lessons.

5. "Expression" work and active participation by boys in the learning of subject.

6. Use of teaching devices and appliances.

SPECIAL PAPERS

Paper VII

(Detailed Syllabuses are omitted.)

PART I—THEORY

2. *The East Punjab University*: The B.T. course of this university is given below: —

Paper I: *Principles of Education*

Philosophical and Psychological basis of Education—100 marks.

PART I—20 MARKS

1. Relation of Philosophy with Education. The influence of Naturalism, Idealism and Pragmatism on the Theory of Education.

2. Individual and Social Aims of Education; Totalitarian and Democratic aims. Education and the New World Order. Freedom and discipline.

3. Social environment of the individual: home, school, society and State.

4. The role of the teacher in education; mental attitudes and moral qualities of the teacher.

PART II—80 MARKS

1. Need for the study of Psychology for an educator.

2. Definition and scope of Psychology. Methods of Psychology observation, experiment, introspection and psycho-analysis.

3. Relation between body and mind. A brief description of the nervous system, ductless glands and the digestive system. Inter-action of body and mind. Fatigue: physical fatigue, mental fatigue and boredom.

4. Life—urges or instincts and emotions; their modification through experience and training; educational activities for the training of emotions, sublimation. The role of fear in education.

5. Herd instinct, imitation, suggestion and sympathy. Leaders and their chief characteristics; leaders in the school.

6. Constructive instinct and aesthetic sensibility; art and craft in the school.

7. Play; its chief characteristics; play-way in education.

8. The formation of habits; emotional habits or sentiments; moral sentiments, the self-regarding sentiments and the formation of character. Moral training of the child.

9. Self and moral self; mental conflict; will and its training. Temperament and personality.

10. Adolescence; its chief marks; its difficulties; attitudes, help and guidance of parents and teachers.

11. The unconscious mind, formation of complexes, the inferiority complex, its causes and cure.

12. Delinquency, its causes and curative and preventive measures.

13. The conscious mind. Attention and interest, perception and the training of the senses. Images, fantasy and creative imagination. The importance of fairy tales in childhood. Ideas, reasoning and training in reasoning.

14. Memory; improvement of memory; methods of memorising; forgetfulness, natural and morbid (active).

15. Learning, its nature and laws; transfer of learning.

16. Intelligence and intelligence tests: their educational uses.

Paper II: Principles of Education

General Methods Including Certain Aspects of the History of Western Education

Part I—70 Marks

1. General Principles of Good Teaching:

(a) Relation of knowledge to life—the place of the book in education.

(b) Learning as by-product of purposeful activity: Activity Methods and Activity Schools.

(c) Teaching as stimulus to learning; teacher-pupil co-operation in learning—teaching "how to study".

(*d*) Motivation in learning—creation of "Learning Situation"; the Child's pragmatic approach.

(*e*) Arrangement of lessons into Psychological units.

(*f*) "Expression" and "Application" work—its different types.

2. Different types of Lessons—Knowledge, Skill, Application and Appreciation Lessons; their function in education.

3. Different methods of teaching—Inductive, Analytic, Heuristic, Problem, Individual and Group Methods; their suitability for various types of lessons.

4. Devices of Teaching:

Exposition and Illustration; Choice of suitable language; Art of Questioning and dealing with answers; Text-Books; Libraries; Teacher's Diaries, Pupils' Note-Books, Written Exercises, Home Work and their appraisal and correction, Examinations; Aids to Teaching: Blackboard, Gramophone, Magic Lantern, Cinema and Radio, etc.

5. New educational methods—their purpose and significance; Modern Developments in educational practice with special reference to the Contributions of the Montessori Method, Project Method, Dalton Plan, Socialised Methods and the Basic Scheme.

PART II—30 MARKS

The contribution of the following important educationists to the growth of Modern methods and their relevance to Indian conditions.

Rousseau, Froebel, Montessori, John Dewey.

PAPER III

School Organisation Including Outline History of Indian Education

PART I—70 MARKS

1. Objectives of School Organisation:

(*a*) The School Curriculum and schemes of Study.

(*b*) Organisation of Social Life.

(*c*) Relationship of the School and the community.

(*d*) Extra-curricular activities.

2. Different grades of Schools, their place in national education. Diversification of types of Secondary Schools.

3. Internal Organisation of School work:

(*a*) Classifications of pupils; the principle of elasticity and individual differences; modern devices of classification.

(*b*) Arrangements for exceptional children.

(*c*) Programme of daily work—Construction of the Time-Tables; factor of elasticity; problems of Schools with insufficient staff; scope for curricular and extra-curricular activities.

(*d*) Appraisal of School work—Tests and annual promotions; criticism and reform of Examinations. Construction and use of Scholastic (achievement) objective tests.

4. The School Staff:

(*a*) Strength and Qualifications. Qualities of a good teacher.

(*b*) Distribution of work; specialist and class teachers.

(*c*) The duties of the teachers towards:
(1) the pupils, (2) the parents, (3) the community.

(*d*) The duties of the Headmaster—supervision, administration and helpful leadership.

(*e*) The duties of the community towards the Teacher.

5. The School as a Community:

(*a*) Children's Social Life—its educative value and possibilities.

(*b*) Contact with parents.

(*c*) School Functions.

(*d*) Problem of Discipline and Self-government; rewards and punishments.

(*e*) Opportunities for Civic Contacts and Civic Training.

(*f*) Life in the hostel—its opportunities and organisation.

6. Organisation of Extra-curricular Activities:

(*a*) Games and Sports—need for variety Tournaments.

(*b*) Group activities; Debates, Drama, School Magazines, Gardening Excursions.

(*c*) Social service and Scouting with special reference to community service. School as a Social Centre.

(*d*) Leisure hobbies—Photography, Art, Music, Library work and research.

(*e*) Their relationship to ordinary school work.

7. The Health of the pupils:

(*a*) Physical Education—its general and corrective uses; its different forms.

(*b*) Good Postures; Fatigue, Rest and Sleep.

(*c*) Medical Inspection and Treatment—its achievement in other countries and the position in India.

(*d*) The problem of Malnutrition.

(*e*) Making the School buildings healthy and spacious—their site and planning, lighting and ventilation, water supply and lavatory arrangements. Special subject rooms, gymnasium and dining rooms.

(*f*) Proper equipment and furniture for Schools—Suiting the furniture to the pupil, value of light and moveable furniture, equipment of special rooms, the Library and the Laboratory, colour, colour harmony and pleasant effects.

8. School Office and Records—their maintenance, distribution of work.

PART II—30 MARKS

Outline History of Indian Education

1. Development of Indian Education since Macaulay in outline with special reference to the following:

Expansion of Primary Education—Discussion of its main problems. Question of medium of Instruction. The organisation of Secondary Education. Dominating influence of the Matriculation Examination. Schemes of Educational Reconstructions.

2. School organisation in the Punjab and its special problems—Compulsion, Wastage and Stagnation. Rural Education and Single Teacher Schools. The length of the Primary school Course. Education of girls. Possibilities of Co-education. Education of backward classes and of defectives.

PAPER IV, V AND VI

Methods of Teaching Special Subjects. Any Three of the following of which one but not more than two must be selected from Group "A" and the remaining from Group "B"

Group A	*Group B*
1. English,	1. Mathematics,
2. Modern Indian Language, or	2. Science,
3. Classical Language.	3. Geography,
	4. History and Civics, or
	5. Domestic Science (for women only).

(Detailed syllabuses are omitted).

PAPER VII (Optional)—MARKS—100

(1) Nature Study and Everyday Science

1. What is Nature Study? The aim and method of Nature Study.

2. Characteristics of living bodies; forms of life; distinction between plants and animals; interdependence of plants and animals; value of plants and animals to man; the unity of life.

3. The plant; its organs and their chief functions, Food of plants.

4. An insect, stages in the life of a house fly or a mosquito ; birds—their value to mankind : names of a few common bird friends and foes.

5. Human life and health—importance of pure air and water purification of air, respiration.

Evaporation and condensation, clouds, rain. Other sources of water supply ; modern methods ; chief impurities in water, purification of water for domestic use.

Food—chief constituents ; importance of mixed diet ; some common Indian Food products and their value.

6. Man's control of heat—art of fire-making ; nature of fire ; control of and use of heat in the home ; clothing, kitchen, heating the home.

7. *Hobbies*—their importance, a few common hobbies, that can be usefully started in schools, viz. soap, oil, ink-making, disinfectant and chalk sticks.

8. Importance of electricity in the modern life ; general hints on the care and maintenance of radio set ; the working of a magic lantern.

Note : There will be no practical for Nature Study.

(2) *Art and Educational Handwork* : Marks—100.

Allocation of Marks.

Theory	60
Practical Art and Crafts	20
Record of work in Art and Craft	20

Theory

What is educational handwork ? What is the aim and purpose in teaching it ? What is its relation to Art ? Primary and Secondary stages of instruction—scope of instruction at each stage. What crafts to teach and at what stage ? Amount of time necessary. Methods of instructions. Size of classes, nature of equipment and material—use of simple material easily and cheaply available in towns and villages. The Art and Craft Room.

Aim and method in special reference to teaching of Art in ordinary schools. The group methods of instruction as opposed to individual training. Simple principles of Art appreciation.

Suitable syllabuses for rural and urban schools.

Correlation of educational handwork and art with other subjects : Literature ; History ; Geography ; Mathematics ; Science.

Art Practical

Free and expressional drawing. Copying of simple sketches and pictures freely to given scale. Drawing from memory after " exposure " from given length of time.

Crafts (any two of the following)

(a) *Books Binding*: Single section note-books with limp or card-board covers: Blotting pads; shopping lists and tear of pads; Binding single section books with stiff covers, quarter-bound; preparation of glue, *levi* (flour paste), and other binding materials.

(b) *Lettering*: Questions will be set to test the candidate's knowledge of the standard Roman (English) or Persian (Urdu) or Devnagri (Hindi), or Gurmukhi scripts. The qualities of good lettering with emphasis on spacing. Cutting a reed pen. Simple letter stencilling.

(c) *Mounting and framing of pictures*: Mounting on thick paper; Mounting on prepared mounts; Making of mounts from card-board; Making of frames from bazar wood; Glazing and sizing of glass; Preparing backing for pictures; Fixing of picture rings, cords; Selection of suitable position for hanging of a given picture.

(*d*) Leather work.

(*e*) Use of Paper Pulp.

(*f*) Scientific Hobbies.

(g) *Wood Work*: Cubes 1½, a Round Ruler; Thread winding a wall bracket, a Chawki; an Eggstand; a Science budge; Pen and ink-stand; a *madhani* (churn): Test tube stand.

(3) *Indian Music*: 100 Marks.

Note: To be taken up by candidates who have passed the Intermediate or equivalent examination in Indian Music.

1. Music: Its place and functions in human and in national culture. Aims and objects of including it in the school curriculum. The individual and the social functions of music. The decay of Indian Music and the possibility of notation for Indian Music its revival.

2. Brief History of Indian Music: Rage and Ragnis. The scale of notes. Alaps. Possibilities of notation for Indian Music.

3. Vocal and instrumental Music. Different Musical Instruments. The Tabla, the Violin, Sitar, Dilruba and Guitar. Tuning of Instruments.

4. Method of Teaching: Developing the child's interest and capacity for self-expression. Developing the sense of time and rhythm. Marching songs. Clapping. Time combination and syncopations. Community singing. Voice production, breathing and correct postures.

Practical

1. Observation of 10 lessons on Indian Music.
2. Twelve Practice lessons given by the students under supervision.

PART II: PRACTICE OF TEACHING

Every candidate shall be expected to have undergone the following course of practical instruction in a Training College affiliated to the University:

(i) Observation of Model Lessons given by the staff of the Training College in the special subjects selected by the candidate.

(ii) At least three discussion lessons to be given by the candidate under the supervision of the Training College staff.

(iii) Internal school practice under the supervision of the Training College staff for at least one week during the period of training.

(iv) One month's School Practice under the supervision after completion of the Theory Examination.

The practical Test shall be conducted by a Board of Examiners consisting of two External and one Internal Examiner. The Board before giving the award will consider the college estimate of each candidate based upon the practical work done by him during the year.

Every candidate shall submit one week in advance of his Practical Examinations three topics, i.e. one from each of the subjects selected by him on which he is prepared to give a lesson, and the examiner shall select two out of these for his Practical test. The candidate shall be given at least 24 hours' notice of the topics selected. He will be required to prepare detailed notes of the two lessons which he is required to give and shall present these notes to the examiners at the time of the Practical Examination.

3. *Gauhati University*: This University follows the courses of the Calcutta University which are already given.

4. *Jammu and Kashmir University*: Some extracts from the B.T. ordinance of this University are given below:

1. The examination for the Degree of the Bachelor of Teaching shall be open to:—

   (*a*) any candidate of the Jammu and Kashmir University, or any recognised University, who after passing the examination for the Degree of Bachelor in any Faculty, has undergone the course of training for the degree for one year at a Training College for teachers affiliated to the Jammu and Kashmir University;

   (*b*) any graduate of the Jammu and Kashmir University, or subject to the sanction of the Syndicate, of any other recognised University, who has passed the S.A.V. Examination;

   (*c*) any woman graduate of the Jammu and Kashmir University, or subject to the sanction of the Syndicate, of any other

recognised University, who is working as a teacher, within the territorial limits of this University, in a recognised school or in a school approved by the Syndicate, or in a four-year institution affiliated to this University upto the Intermediate standard, for nine months prior to the date of application and is admitted under Section B (entitled "Admission of Private Candidates to University Examinations"), of Chapter XXXIII:

Provided that the Syndicate, or the determining authority, shall have power to exclude any candidate from the examination if it is satisfied that such candidate is not a fit person to be admitted thereto.

2. The examination shall be held in two parts:—

Part I. Theory.

Part II. Practice of Teaching.

Part I

The examination in Theory shall consist of six compulsory papers of three hours each and one optional paper.

Paper I. Principles of Education dealing mainly with the Philosophy and Psychology of Education.

Paper II. Principles of Education dealing mainly with Methods of Teaching and including such aspects of the History of Education in the West as have a direct bearing on the development of Educational Theory and Practice.

Paper III. School Organisation and Management including modern ideas of physical education and relative aspects of the History of Indian Education.

Paper IV, V, VI. Methods of Teaching Special Subjects.

Any three of the following of which one, but not more than two, must be selected from Group "A' and the remaining from Group "B":—

Group "A":

(1) English.

(2) One Modern Indian Language.

(3) One Oriental Classical Language.

Group "B":

(1) Mathematics.

(2) Science.

(3) Geography.

(4) History and Civics.

(5) Domestic Science (for women only).

* Paper VIII. Optional.

Any one of the following subjects, a pass in which will be shown separately on the candidate's certificate: Nature Study, Art and Educational Handwork and Music.

English shall be the medium of examination except in the case of Oriental Classical and Modern Indian Languages, where the medium of examination will be the allied Modern Indian Language in the case of Oriental Classical Languages and the particular Indian Language in the case of Modern Indian Languages.

Part II

Practice of Teaching shall consist of:—

Practical tests in all subjects under this paper to be held immediately after the written examination is over, so that there may be no interference with the period reserved for Practice of teaching.

(a) A report on the candidate's practical work as conducted under supervision by the authorities of the Training College in which he has received his training.

(b) † Practical Skill in Teaching as shown in two lessons, in different subjects, out of those taken by the candidates, given in the presence of a Board of Examiners.

All candidates shall be required to obtain pass in each part of the examination, i.e. Theory and Practice, separately, and the Diploma awarded on a candidate will indicate the division he obtains in each part.

3. The following is the scale of marks allotted:—

Theory

Paper I: Principles of Education; Philosophy and Psychology of Education—(100 marks).

Paper II: Principles of Education, General methods including history of their development—(100 marks).

Paper III: School Organisation and Management including history of the growth of School Education in India—(100 marks).

Paper IV: Methods of Teaching; First Selected Subject—(100 marks).

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* Marks obtained in this paper shall not count towards the division of the candidate, or for the purposes of aggregate, but will be shown separately on the certificate.

† The Practical Examination for Skill in Teaching for each candidate is to be conducted on two consecutive days (one lesson a day) at Srinagar.

Paper V: Methods of Teaching; Second Selected Subject—(100 marks).

Paper VI: Methods of Teaching Third Selected Subject—(100 marks).

Paper VIII: Optional—(100 marks).

Practice of Teaching

Practice of Teaching—(200 marks).

4. The minimum number of marks required to pass this examination in Theory shall be 33 per cent in each paper and 40 per cent in the aggregate.

The minimum number of marks required to pass in the Practical Examination shall be 40 per cent.

5. Candidates who obtain 65 per cent or more of the total number of marks shall be placed in the First Division; those who obtain not less than 55 per cent shall be placed in the Second Division; and all below in the Third Division.

A candidate who passes in the aggregate at the annual examination but fails in only one paper in the Theoretical Examination may be permitted to appear in the subject in which he failed at the next University examination, and if he fails to pass or present himself for the examination, then at the next University examination, on payment of a fee of forty rupees, plus marks fee of Re. 1 if the candidate desires to know his marks, on each occasion, and if he passes in that subject in either of these examinations, he shall be deemed to have passed the examination for the Degree of Bachelor of Teaching.

The above Statute shall also apply to the Practical Test.

A candidate who passes in Theory but fails in the Practical Test shall not be required to do the Theoretical part of the examination again, and a candidate who passes in the Practical Test but fails in the Examination for Theory shall not be required to take the Practical Examination again.

The syllabus of this University is similar to that of the East Punjab University. We, therefore, give below only those points where it differs from the East Punjab course which has already been given above.

Part I—Theory

PART I: Principles of Education

Philosophical and Psychological Basis of Education (100 Marks).

Part I—30 Marks

1. (*a*) Place of Education in Human Life—Education as a Social Function.
   (*b*) Education for life through participation in life.
   (*c*) Formal and Informal Education.
   (*d*) The School as a Special Environment.
   (*e*) Education as Conservative and Dynamic, i.e. transmission and reconstruction of Social Experience through Education.
2. Aims in Education.
   (*a*) Reaction of Social Conditions on Educational Aims.
   (*b*) Influence of idealism, Naturalism and Pragmatism.
   (*c*) Individual and Social Aims.
   (*d*) Discussion of educational aims with special reference to Indian conditions.
3. Education and other Social Agencies.
   (*a*) The Home and the School—continuity of child life, and interests and technique of work.
   (*b*) Education and Vocation—Vocational and Liberal education; their synthesis.
   (*c*) Education and the State—Nature and Scope of State Control; Freedom in Education; Democratic Conception of Education —Movement for equality of opportunity in the educational field.
   (*d*) Education and Religion.
   (*e*) Cultural Institutions—Their relation with Education.

Part II (70 Marks)

I. Relation of Psychology with Education.

II. The Child's Native Endowment.
   (*a*) The child as a living organism; its active contact with the environment.
   (*b*) The relation of the body and the mind; the sensory system; the role of motor activity in mental development.
   (*c*) Instincts and Innate tendencies; Memory.
   (*d*) Psychological Characteristics at different stages of growth—childhood, pre-adolescence and adolescence.

(*e*) Individual differences.

III. The growth of the Mind.

(*a*) Mental development—an active, dynamic and social process.

(*b*) Experience—personal activity and environmental contact—the basis of mental growth.

(*c*) The education of instincts.

(*d*) The development of Personality—cognitive, affective and creative role of emotions and sentiments; freedom and discipline.

IV. Psychology of Learning.

(*a*) Activity of the Senses; Perception of Observation.

(*b*) Acquisition of Habits and Skills—Repetition, Fatigue.

(*c*) Motivation of Learning through Interest; Attention.

(*d*) Memory and its Training.

(*e*) Reasoning—Conditions favourable to intelligent thinking.

(*f*) Imagination—Reproductive and Creative.

(*g*) Transfer of Training.

V. Testing of Learning and Intelligence.

(*a*) The nature of Intelligence.

(*b*) Mental and Scholastic Tests—their uses in school.

(*c*) Tests for mentally defective children.

VI. Mental Hygiene.

(*a*) Mental conflicts and repressions; formation of complexes; effects of bad home and school conditions.

(*b*) Ordinary types of delinquent and maladjusted children in schools; possibilities of sublimation of other simple psycho-analytic treatment in the class-room.

PAPER II

Same as in East Punjab.

PAPER III

Same as in East Punjab.

PAPERS IV, V, and VI

Same as in East Punjab.

PAPER VII

(Optional—Marks 100)

(1) Nature Study and Everyday Science.

1. The aim of Nature Study—Characteristics of living bodies.

2. Plant Life.

   (*a*) The plant—organs and functions.

   (*b*) The tuber with special reference to potato.

   (*c*) Leaves—general structure and functions.

   (*d*) The flower—its components; pollinations, and its effects, agencies effecting pollination, fruit.

   (*e*) Seed and germination—conditions necessary for germination.

   (*f*) Food of plants—chemical elements of plants; food—a green plant obtains (i) from the air, (ii) from the soil; storage of excess food.

3. Insect Life—General description; life cycle of a house fly and a mosquito.

4. Bird Life—Value of birds to mankind; bird friends and foes.

5. Value of plants and animals to man—Food, fuel and power, clothes, building materials, medicine, luxuries, etc.

6. Inter-dependence of plant and animal life—Carbon and Nitrogen cycle in nature; man's influence on plants and animals; the unity of life.

7. Natural Phenomena—Evaporation and condensation of water; clouds; rain, snow, ice and dew.

8. Human life and Health.

   (*a*) Importance of pure air and water, purification of air, respiration; sources of water supply, modern method; chief impurities in water, purification of water for domestic use; precautions to insure a good water supply during an epidemic like cholera.

   (*b*) Food, chief constituents, importance of a mixed diet; some common Indian food products and their value; digestion of food in the body.

   (*c*) Bacteria, preservation of food, bacteria and disease, infection, body's defence against bacteria, uses of bacteria.

   (*d*) Healthful surroundings. Breeding places for harmful insects; general cleanliness and beautiful surroundings.

9. Man's control of heat—Art of fire making, nature of fire, control and use of heat in the home, clothing, kitchen, heating the home.

10. Hobbies and other information useful to a teacher.

   (*a*) Importance of hobbies, some useful hobbies for schools:

      (i) Soap, ink, disinfectants, black-board paint, chalk-sticks.

      (ii) Photography.

      (iii) Collection of leaves, feathers, stamps.

(iv) Dry-cleaning and stain removing.

(v) Making of common jams and pickles.

(b) General hints on the care, maintenance and working of a radio. Working of a magic lantern, epidiascope, a school cinema machine.

(c) Electricity in modern life, general talks on; setting up an electric bulb in a school room.

(2) Art and Educational Handwork (100 Marks)

Same as in East Punjab.

(3) Indian Music

Same as in East Punjab.

PART II—PRACTICE OF TEACHING

Same as in East Punjab.

5. *Andhra University* The syllabus of the B.Ed. course of the Andhra University given on pp. 161-67 is the *old* syllabus and the last annual examinations under it shall be held in 1953. The *new* course which is introduced from 1950-51 is given below.

1. The B.Ed. Degree Examination shall consist of three parts of which Parts I and II comprise the Written Examination and Part III, the Practical Test.

Part I

(1) The Theory and Practice of Education I. (3 hrs., 100 marks)

(2) The Theory and Practice of Education II. (3 hrs., 100 marks)

(3) The Principles and Practice of Basic Education, including Pre-Basic. (3 hrs., 100 marks)

Part II

(4) Methods of Teaching—General—
(In this paper, candidates shall not be permitted to answer questions on the special subjects chosen by them under Methods of Teaching—Special). (3 hrs., 100 marks)

(5) (i) Methods of Teaching—Special—Group A—(The questions in all the subjects shall be printed in one paper). ($1\frac{1}{2}$ hrs., and 50 marks for each subject)

(ii) Methods of Teaching—Special—Group B. (2 hrs., 50 marks)

(6) Health Education, Citizenship Training and Physical Education. (Non-Examination subject)

Part III

(7) Practical Training—

(i) Teaching Practice. (100 marks for each subject)

(ii) Practical working and Maintenance of Audio-Visual Aids; Preparation and maintenance of other Apparatus. (40 marks)

(iii) Measurement and Diagnosis (Examining, Testing, Recording, Evaluating). (40 marks)

(iv) Practical Aspects of Health Education Citizenship Training. (40 marks)

Physical Education. (40 marks)

(v) Arts and Crafts or Home Science for Women (including Basic Crafts). (40 marks)

(*a*) Under '(i)—Teaching Practice' 40 per cent of the marks in each subject shall be allotted for the Teaching Practice work done at College (i.e. Teaching Practice Lessons and Records of Observation, of Teaching Practice Lessons and of Notes of Lessons); and the remaining 60 per cent for the lessons given at the Examination. There shall be two examiners appointed for each subject to evaluate the lessons given by candidate; the examiners being, as a rule, members of the staff of the colleges presenting the candidates for examination. Each candidate shall be tested by means of a lesson of his choice in each of his special subjects. The duration of each lesson shall be half-an-hour. Candidates shall submit full teaching notes of their lessons to the examiners before commencing their lessons.

(*b*) For other aspects of Practical training, i.e. 7(ii), (iii), (iv), and (v) each student shall work under a Lecturer and shall maintain a Work Book under his supervision. Marks in these subjects shall be suggested by the Lecturer concerned. The University shall appoint Supervising Examiners to whom all work books shall be submitted and whose decision as to the marks to be awarded shall be final.

(*c*) Marks for Practical Work in Basic Education shall be entered under '7(v)—Arts and Crafts or Home Science for Women'.

(*d*) The Examiners appointed for evaluating (1) Teaching Practice and the Supervising Examiners appointed for other items of 'Practical Training' shall report to the University the marks awarded to each candidate in the several subjects.

2. A candidate shall be declared to have passed the B.Ed. examination if he obtains

(1) not less than 35 per cent of the aggregate marks in Part I;

(2) not less than 35 per cent of the marks in 'Methods of Teaching—General' and not less than 35 per cent of the marks (in the aggregate, if necessary) in the papers on 'Methods of Teaching—Special', and not less than 40 per cent of the marks in the aggre-

gate in the papers on 'Methods of Teaching—General' and 'Methods of Teaching—Special'; and

(3) not less than 40 per cent of the aggregate marks in Part III.

SYLLABUS

1. *THEORY AND PRACTICE OF EDUCATION—I*

I. Education Psychology

A " Introductory

Scope of educational psychology. Methods of psychological study and investigation as applied to educational problems.

" B " Foundations of Behaviour

The biological background of education—laws of heredity and variation, heredity and environment—Are acquired habits inheritable ?

The physiological background—development of nervous system and special sense organs.

The basic Reflexes—Instincts and emotions—" Conditioning "—Sublimation.

General tendencies—suggestion, sympathy, imitation, play—their role in education.

" C " Acquisition of knowledge and skills

The learning process—Forms of Learning, Laws of Learning—Motivation of Learning—Remembering and Forgetting—Transfer of Training.

Attention—Its nature and Types—Causes and symptoms of inattention—Favourable conditions for securing sustained attention.

Fatigue—Types, symptoms and causes of fatigue—Prevention and remedial measures for school fatigue.

" D " Development of individual

Sensations and perception—Sense training—Observation—Growth of language from childhood—Relation of thought to language—

Conceptual thinking—Empirical and Scientific thinking—Steps in the development of an act of thought—Common errors in thinking—Cultivation of Scientific attitude of mind.

Propensities as the basis of character—Development of sentiments and complexes—Educational applications of psycho-analysis—The unconscious—integration of personality.

Problems of Freedom, Authority and Discipline from the Psychological standpoint.

II. Mental and Educational Measurements

"A" Introductory

1. Inaccuracies in the current system of making and examination. Unreliability of estimates of intelligence and character traits.

2. Essentials of valid measurement—Some simple statistical concepts and devices such as normal curve of distribution, central tendency, variability, reliability, correlation.

"B" Mental Measurement

What is intelligence? Growth and maturity of intelligence—Intelligence, heredity and environment—The concepts of M.A., and I.Q.,—Distribution of intelligence.

Tests of general ability—individual and group tests, verbal, non-verbal and performance tests—Pre-school tests of intelligence.

Principles of test construction—Preparation of norms—Limitations of intelligence tests—The value of intelligence tests for the teacher.

Tests of personality and character—Their use and limitations.

"C" Educational Measurements

Principles of new type tests—Their construction and validation—preparation of norms.

Tests suitable for primary and middle schools—Reading, spelling, grammar, composition, arithmetic, etc.

Attainment tests suitable for high schools for Social Studies, Languages, Sciences, and Mathematics.

The value and limitations of new examination techniques.

The value and limitations of essay type of testing.

II. Educational Sociology

Same as in Madras (pp. 211-12).

Theory and Practice of Education—II

Same as in Madras University given under "Theory of Education" and "School Organisation" (pp. 209-10).

3. *PRINCIPLES AND PRACTICE OF BASIC EDUCATION (INCLUDING PRE-BASIC)*

1. *Principles and Methods of Child Study.*—The contribution of Rousseau, Pestallozi, Froebel and Montessori.

Modern tendencies in Child Education—Pre-school education—Basic and pre-basic education.

Heredity as a condition of development—the importance of physical and mental traits.

The importance of environment (Social Heredity) in the early years of the child.

2. *Play and Play Method.*—Their importance in the development of the child—free and organised play—consideration of the child's play-things and occupation material.

Self-activity, continuity, connectedness and creativeness as guiding principles in early education.

Sense training—its value and limitations—materials and methods.

Activity methods—correlation of teaching with activities—individual and group activities.

Singing and eurythmics—drawing and painting.

3. The main principles of Basic Education—Gandhiji's constructive programme.

The emphasis on craft and productivities—acquisition of manual skill.

4. *The Basic Education.*—Critical and constructive study of available syllabuses in—

(i) Basic Crafts, (ii) Local Languages, (iii) Basic Arithmetics, (iv) Social Studies and Activities, (v) the Human Body, personal and social hygiene, nutrition, home nursing and First Aid, and (vi) Recreative Activities.

5. *The Practice of Basic Education.*—(1) Practical Training in a Basic Craft (e.g. spinning and weaving, agriculture and gardening) ; card-board, wood and metal work ; Home Craft—cooking and laundry work, or other approved craft—choice of craft in varying environment.

(2) Observation of and participation in school programmes, including class work, field work, social training excursions, health programme exhibitions, etc., school as community centre—training in responsibility.

(3) Preparation of Method Units, purposing, planning (including selection and assembling of tools and materials), executing, judging.

(4) Preparation and repair of educational equipment.

(5) Exercise in correlation between basic crafts and other studies.

(6) Teaching Practice.

(7) Organisation and supervision of the basic school, period of compulsory school life—preparation of daily and weekly programmes—Grading of pupils, distribution of responsibilities of staff, educational tests and records, discipline, pupil guidance, community relationships.

4. *Methods of Teaching*

I. General

The same as in Madras (pp. 212-3), except that for item 8—Educational Measurement, the following is substituted :—

1. Emphasis in Modern Education. Child and subject. Learning and teaching individual and class, play and work.

2. The Teaching—Learning Process as the sharing of educative experience: (*a*) Direct Experience (Learning by doing), (*b*) Indirect Experience (Verbal, pictorial and symbolic learning)—their interdependence—need for varied emphasis according to age and development of child, nature of subject-matter, general and special aims of the course.

3. Methods emphasizing Direct Experience; Play ways, Montessori method, Object teaching, Project method, Basic Education, Problem or Heuristic method.

4. Methods emphasizing indirect experience: (i) Oral communication (narration, description, explanation, definition, questioning—group studies, debates, dramas—the gramophone and the radio); (ii) Printed information (text-books, reference books, libraries, newspapers and magazines) (iii) Pictures, diagrams, the Cinematograph.

5. Planning the year's work: (i) Study of syllabus; (ii) Appreciation of procedure involved (chronological or concentric arrangement—psychological or logical order) (iii) Allocation of work per term; (iv) Analysis into Method Units and Lessons.

6. Planning the Method and lesson: Arrangement of subject-matter; planning teacher and pupil activities (individual and group); selection and preparation of teaching aids. Notes of Lessons (motivation, presentation, practice and testing).

7. Use of teaching aids and procedures; blackboard, pictures models, diagrams, books and magazines—films (silent and sound), broadcasts, museums, exhibitions, excursions—the art of questioning, assignments, note-books and diaries.

8. Moral education: Direct and indirect ways—sharing responsibility—biography, problems of conduct (individual and social), trait studies—ethical, social and aesthetic appreciation.

9. Adult education: aim—contents and methods and organisation of adult education in U.S.A. and England—the problem in India with special reference to methods of rapid literacy and propaganda regarding the value of education—traditional methods of adult education in India, social, liberal and vocational nature of adult education.

II. Introduction to the teaching of various School Subjects

Same as in Madras (pp. 213-14).

5. *Methods of Teaching—Special.*—(Detailed syllabuses are omitted here.)

6. *Health Education, Citizenship Training and Physical Education.*—Same as in Madras (pp. 214-17).

7. (ii) *Practice Training.*—Same as in Madras (pp. 217-8).

7. (iii) *Measurement and Diagnosis.*—Same as in Madras (p. 218).

6. *The L.T. Diploma of Uttar Pradesh* : In Uttar Pradesh, the Department grants an L.T. diploma to graduate teachers trained for one year. The details of the course are given below.

Control.—The Colleges are maintained by Government and are under the control of the Director of Education, United Provinces. They prepare students for the diploma of Licentiate in Teaching awarded by the Department of Education, United Provinces.

Session.—The session begins on the Monday following the eighth day of July (but if the eighth of July be a Monday then on 8th July), and ends on the Thursday following the second Monday in April.

Course of training.—This extends over one session, and includes the following :

(1) *Practical teaching.*—(*a*) Practice by students, supervised by the College staff.

This consists of at least 70 lessons in connected series. Students will be expected to teach at least *two* of the following subjects :

Either English *or* Hindi *or* Urdu :

History, Geography or Social Studies.

Mathematics.

General Science *or* Science (Physics and Chemistry).

Other special subjects which may be provided for at the College with the approval of the Director of Education.—

(*b*) Blackboard writing and sketching.

(*c*) Manual Training and Handicrafts.

(*d*) Criticism lessons : one at least by each student.

(*e*) Demonstration lessons : these are given by members of the staff of the College.

(2) *Theory of teaching.*—(*a*) The courses of study are those prescribed for the diploma of Licentiate in Teaching of the Department.

Moral and Social Hygiene.—(*b*) Eight lectures are delivered on this subject in the third term to men students only.

(3) *Special Courses.*—In addition to the ordinary course for the L.T., students are encouraged to specialise in the methods of teaching one of the main branches of the School curriculum. Students who thus specialise are presented for a special examination and, if successful, will have an endorsement on their diploma of special qualifications for teaching a particular branch of the School curriculum. *Licentiates in*

Teaching may, at any subsequent examination, appear for a special examination in theory and practice in any additional subject, provided they attend the College for at least 50 working days for each such subject.

The Colleges at Agra, Lucknow and Banaras for men and at Allahabad for women at present makes provision for the following special subjects: Hindi, History, Geography, Mathematics, and General Science. The Basic Training College, Allahabad, makes provision for Art, Crafts, Spinning and Weaving and Agriculture.

Provision for other special subjects at a College may be made with the previous sanction of the Director of Education.

Examination.—The examination for the L.T. diploma shall consist of two parts:

Part I—Written examination.

Part II—Test in practical skill in teaching.

Part I.—The written examination shall consist of the following papers:

(1) Educational and Experimental Psychology (one paper).

(2) History and Theory of Education (one paper).

(3) Educational Organisation, Physiology and Hygiene (one paper).

(4) Methods of Teaching (one paper).

In addition to the above a candidate may offer an additional paper in the special subject in which he has received training. Only one special subject may be offered at a time.

Part II.—Practical skill in Teaching—This will be adjudged by (1) the candidate's teaching during the session and (2) a test in teaching a class in the presence of two examiners. Each candidate shall give two lessons on two of the subjects taught by him.

In addition to Part I and Part II of the examination each candidate will be required to have taken complete courses at the College in at least one of the undermentioned subjects and shall submit a certificate to this effect from the Principal, Training College, with his application for admission to the examination:

(1) Physical Training.

(2) English Phonetics.

(3) Hindi Phonetics.

Further particulars of the L.T. examination are given in Appendix C:

Admission.—The Colleges admit graduates of universities established by law in the United Provinces who have resided for three years in the United Provinces. Graduates of other educational institutions in

the Province, whose degrees are equivalent to the B.A. degree by Government order are also eligible for admission. Graduates of other universities established by law in British India may be admitted only in special cases and for special reasons and with the previous sanction of the Director.

Paper I. Educational and Experimental Psychology

A. Educational Psychology

1. The meaning and aims of education with reference to the individual and the community. The relation of the science of psychology to the theory and practice of education.

2. The scope and methods of Educational Psychology.

3. Conception of mind as underlying behaviour-consciousness and the unconscious. Powers of the mind.

4. Factors in education. Heredity and environment—their application to Psychology and Educational Theory and Practice.

5. The nature of instincts and the part they play in the development of the child.

6. The importance of instincts and emotion in educational theory and practice. General tendencies—the routine tendency, play, sympathy, suggestion and imitation—their role in the education of the child. The psychology of the Group.

7. The development of Sentiments and Habits. Character and Will, their importance in education; acquisition of skill. Attention and interest.

8. Stages of child development, main characteristics of various stages and their importance in the scheme of education.

9. Theories of Mental Conflict, their importance to the educator. The type in Education—Introvert and Extrovert.

10. Sensation and perception. Conceptual thinking and reasoning. Learning and its laws. Fatigue in learning.

11. Association and memory. Habit memory and true memory. Remembering and forgetting. Transfer of Training.

12. Intelligence, its nature and measurement. Intelligence and achievement tests.

B. Experimental Psychology

The course shall be conducted on the basis of practical work in the Laboratory and in close co-ordination with the syllabus on Educational Psychology.

Theory Paper

Nature of Modern Psychology.—Its objective and experimental approach—Methods of Experimental Psychology—Precautions in Experi-

ments in Psychology—Place of Experimental Psychology in Educational Practice.

Sensations.—Vision—intensity, hue and saturation—Simultaneous and successive colour contrasts — Hearing — Skin sensations — Spatial Threshold Kinaesthetic sensations—Sense development in children.

Perception.—Nature of Perception—Gestalt theory—Experiments on Perception—Perception in Reading—Eye-movements—Eye-voice Span—The development of children's percepts.

Attention.—Conditions of attention—Span of attention—Fluctuation of attention—Division of attention—Motor accompaniments of attention.

Imagery and Association.—Types of imagery—Experimental investigation on imagery and imagination—Laws of Association of Ideas—Experiments on Free Association.

Feeling and Emotion.—Methods of Study—Methods of Impression and Expression—The Psycho-galvanic Experiment—Instincts and Emotions—The Complexes—The Psycho-analytical procedures—Free Association—Rooschach technique—Thematic. Apperception technique—Emotional Types—Suggestion—Investigating suggestibility.

Memory.—Immediate Memory—Perseveration—Permanent memory—Recognition and Recall—Curve of Forgetting—Distribution of Learning periods—Memory for Forms—Memory for Meaningful Material—Retroactive Inhibition—Interference.

Action.—Levels of Action—Reaction Times—The Conditioned Response—Pavlov and Watson's experiments.

Learning.—Trial and Error Learning—Thorndike's experiments—Trial and Error Learning in human beings—"Insight" Learning—Kohler's Experiments—Improvement in Learning—Learning Curve—Plateau—Problem-solving—Analysis.

Thinking.—The "Thought-Experiment"—Imageless thought—Conscious attitudes—The anticipatory Scheme—Induction or Concept formation—Objective and introspective experiments—Spearman's Laws of Noegenesis.

Fatigue.—Nature of Fatigue — Muscular Work — Ergograpt — Work Curve—Methods of investigating mental fatigue.

Mental Measurement.—Intelligence—Its nature and its tests—Individual and Group, Verbal and Performance Tests—Sholastic tests—Tests of special abilities—assessment of Temperament and character—Modern Clinical methods—Problem Children—Their diagnosis and treatment—Vocational Guidance.

Statistical Treatment of Result.—Grouped and ungrouped data—Mean, Median and Mode—Standard Deviation—Normal Distribution—Co-efficient of Correlation.

Note.—The arithmetical compilations required should be of the simplest nature.

List of Experiments for Practical Work

1. Free Association (Continuous Method).
2. Free Association (Word-list Method).
3. Constrained Association (Thinking).
4. Span of apprehension with the help of the Tachistoscope (Perception and Reading).
5. Learning (Methods of Substitution).
6. Learning (Trial and Error).
7. Spatial Threshold.
8. The relation of Speed and Accuracy.
9. Perseveration in Memory.
10. Immediate Memory.
11. Permanent Memory.
12. Administration of a Psychological Test.

Paper II : History and Theory of Education

A—WESTERN EDUCATION

1. The aims and ideals of Greek Education : Its influence on early Christian Education.

2. Education in the Middle ages ; Monastic Education as a moral discipline ; its scope and importance. Scholasticism ; Its nature and purpose as an intellectual discipline ; Contents and method.

3. Renaissance and Reformation ; Educational Meaning of the renaissance ; revival of the idea of the liberal education and humanistic education.

4. Educational influence of the Reformation with special emphasis on the aims and contents of elementary and secondary education.

5. The various tendencies in Education :

(*a*) Realism—Humanistic-realism, social realism, sense realism.
(*b*) Disciplinary conception of education.
(*c*) Naturalism in education.
(*d*) Idealism in education.
(*e*) Psychological, scientific and sociological tendencies in education.
(*f*) The modern Electric tendency.
(*g*) Pragmatism in Education.

Note.—(i) In dealing with the above topics only the psychological and philosophical bases of education need be considered.

(ii) Dewey's educational philosophy may be dealt with in detail with the help of the existing prescribed books to illustrate some of the last-named educational tendencies.

B—Indian Education

From the earliest times to the present-day important historical landmarks in Ancient, Medieval and Modern Periods with emphasis on the aims of education at different periods.

Problems

(*a*) Primary Education—Its early history—Filtratios Theory—Halqabandi Schools, Primary education acts—Compulsion—Its difficulties—The Wardha Scheme of National Education—The Basic Education.

(*b*) Secondary Education—Its curricula and management—Reports and Reorganisation,

(*c*) University Education—Its origin and development—Reforms in the present-day University Education. Inter-University, Board, Committees and Commissions.

(*d*) Adult Education—Literacy.

(*e*) Girls' Education.

(*f*) Technical and Vocational Education.

(*g*) Training of Teachers—Nature of the Training provided.

Paper III: Educational Organisation, Physiology and Hygiene

A—Modern Educational Developments

Curriculum. Problems of curriculum construction. Subjects of the curriculum and reasons for their inclusion; their relative importance at different periods of school life. Principles of Curriculum Organisation. Types of Curriculum Organisation. Correlation of studies. Variations in curriculum to meet the varying needs of various types of schools and scholars of different ages—Primary, Middle and High School Stage. Development of the modern conception of synthesis in school curriculum.

Development of Courses of study and selection of Text-Books.

Modern findings about the innate capacities of pupils. The bearing of these findings on curriculum, on class and school organisation. The present system of class instruction; its merits and demerits, its modifications, treatment of individual types of pupils.

Development in Educational Practice. Characteristic trends in the current educational thought and practice. The "Free Work" and "autodidactic" methods in individual instruction. Froebel's, Kindergarten, Montessori Method, Dalton Plan, Project Method, Play-way in Education. Batavia System of combining individual and group instruction. (This part of the paper will be dealt with in connection with the

differences in innate capacities of pupils, emphasis being laid on the psychological and organisational aspects of these developments.)

B—School Organisation

The Head Master, his duties and responsibilities. Determining the staff; qualifications and selection. General and Specialist Teachers. Assigning the staff, allocation of work.

The Construction of School Schedule; Principles of Time-Table, Practical considerations in connection therewith. Home-work, its necessity, apportionment and supervision.

Discipline, its importance and objectives. Agencies of disciplinary guidance. Self-Discipline; Order; Class Control. The qualities of a successful teacher. Discipline and Mental Hygiene.

Punishment and reward; their utility and limitations. Corporal, punishment; Other punishments.

Organising and administering Student's Organisations. Place of Student's Organisations in Education. Dangers and limitations of activities. Regulation of pupil participation. Forms of organisations of pupil-government. Esprit-de-corp, what it is and how to secure it, School Laws, rules and regulations, School Functions; Annual days, the assembly parade. School Games and Sports; administration of inter-scholastic athletics. Extra-Curricular activities such as debating society, excursions and scouting. Problems of Community data, parental co-operation. Hostel; co-operate life; duties of Superintendent.

The School Library; its use and organisation; General and sectional libraries.

The School records and registers; their maintenance.

Examinations; Methods of testing progress; Terminal and Annual Examinations, Modern criticism of Examinations. Suggested remedies. The basis of Annual Promotion.

C—Physiology and Hygiene

1. Value of knowledge of hygiene to the teacher. Importance of the health of the teacher in relation to the welfare of the boys.

2. Personal Hygiene and cleanliness—Clothing, bed, skin, hair, eye, ear, nose, throat, teeth, nails, food, etc.

3. Structure, function and care of the eyes, nose, throat and teeth.

4. Physiology and anatomy of bones, joints, muscles, digestive system, circulatory system, excretory system and brain and nervous system.

5. Common diseases—anemia, malaria, etc.

6. Common contagious and infectious diseases—tuberculosis, small-pox, cholera, etc.

7. Ductless glands and diseases due to their defection—Mental habits.

8. (*a*) Dieting—Over-eating, under-nourishment, balanced diet, vitamins.

(*b*) Consideration for a proper mid-day school meal.

9. First Aid—Simple injuries and ailments and their treatment.

10. Postures in class-room—(*a*) Standing, (*b*) Sitting, (*c*) When reading and writing.

11. Black Board and Reading Type. Paper of the Text-Books and size of letters.

12. Stammering, its causes and treatment.

13. Training of pupils in the economy of work and healthy habits.

14. Fatigue—Overwork in relation to School. Mental and Physical Causes. Estimation, recognition and treatment.

15. Exercise, rest and sleep.

16. General factors influencing health and growth of the children.

17. Some evil effects of school life

(i) Morbidity, (ii) Effects upon growth, (iii) Effects upon the appetite, nutrition and decomposition of blood, (iv) Effects of school postures on respiration, (v) Psycho-pathological effects of School life, (vi) Annual accumulation of fatigue.

18. School Building :

(i) (*a*) Site, (*b*) Building and provisions of instructional space. Provisions for non-instructional space, (*c*) Plan of the building, (*d*) Play-ground.

(ii) Class-room (*a*) Size of the room, ventilation and lighting, (*b*) Fittings—types of desks and their arrangement. Black-Board, Map-stand, etc.

(iii) Hygiene and sanitation of the school and hostel.

19. The object and method of medical inspection—Teachers' part in this.

Paper IV Methods of Teaching

A—Section

Methods of teaching in general ; General maxims of methods, e.g. simple to complex, etc. Inductive and deductive methods. Heuristic Method. The collective lesson ; Individual teaching ; Teaching in sections ; Group work and Individual work ; Exposition and explanation, questioning and answering, dealing with answers ; Methods of dealing with mistakes, oral, written or in construction, etc. narration and description, illustrations and illustrative aids, use of the black-board, diagrams ; relation between the scholar's own work and that of the teacher ; encouragement of private study and working alone by pupils ; differences in methods according to the stages of the pupil,

Scheme of work—their preparation and methods of working out; Single lessons and series of lessons; Notes—full and working notes; revision and values.

B—SECTION

Methods of teaching the various subjects of the curriculum of Secondary Schools in India. Provision and use of apparatus.

The mother tongue (Hindi and Urdu) means of securing clear articulation and accurate hearing; the use of stories, oral and written composition; reading aloud, silent reading; recitation, training in the use of books, texts and more detailed study; grammar and its place, rapid reading; cultivation through prose and poetry of a taste for literature. The teaching of prosody.

English—Early training in speech; The importance of phonetics in the teaching of English; The direct method; Basic English and its critics; Reading at the various stages; Oral and silent reading; Tests in reading; The teaching of prose and poetry; Literature—its place and appreciation; Grammar—how to teach it. Dictation, Translation; Transcription; Composition—oral and written. Correction of work. Consideration of English taught as a foreign language. The place of the mother tongue in the teaching of English.

Number and Elementary Mathematics—Methods and apparatus; the teaching of principles; application of principles; Practical, mental, oral and written work. Correction of work, means of securing speed accuracy.

Observation lessons; Nature study and elementary science, Place of investigation and of information; indoor and outdoor work books and their use; biography; selection of material for schools differently situated; connection with gardening; excursions.

History—Why history should be taught in schools; the different stages and selection of material thereof; essentials of teacher's and pupils work; Making the past real; the History room, the teaching of civics; Local history and excursions.

Geography—The modern conception of geography; the place of geography in the school curriculum; stages and work at each stage; Story and Regional methods; the place of pictures, models, sketches and other material aids, correlation of geography with other subjects and Geographical Excursions; Use of Maps.

Hand work (including Drawing) and its association with other subjects of the curriculum.

Physical Training—Aims and objects of Physical Training; Importance of the teacher.

2. Exercises—their classification and importance of each group (arm, leg, trunk, balance, marching, running, jumping, vaulting and agility).

3. Value of organised games at different ages.
4. Competition and their values and dangers.
5. Organisation and value of school athletic sports.
6. Tests, Measurements and records in Physical Education.
7. Corrective Physical Education.
8. Agencies promoting physical activities in the Province.
9. Organisation and administration of physical education in school.

Art—The new art movement, the meaning and scope of art; Aims and values of teaching Art, the art syllabus; the meaning, scope and methods of teaching; Free expression; Representation, Design and clay-modelling at various stages; Aids in the teaching of Art.

Craft—Importance of activity principle. Reasons for including craft in the curriculum. Basis and criteria for selection of crafts. Principles to be observed in framing schemes and syllabuses. The old teaching of Crafts. Principles of new craft teaching in junior and senior classes.

Spinning and Weaving (General), Importance of Spinning and Weaving in Education, claims of spinning and weaving to be adopted as Basic Craft; Aims and Values, Syllabus of Spinning and Weaving at various stages; Methods of teaching at each stage; correlation, class-room equipment.

Music—Place of music in the curriculum; Classical, light, film and folk music and the claims of each for inclusion in the syllabus. Essentials of a good music syllabus. General principles of teaching music. Methods of teaching ragas, melodic grace devices and tunes. Training in rhythm perception. Training in appreciation.

House-craft—Importance of House-craft. Methods of teaching physiology, Hygiene, First aid, Home nursing, sewing, Embroidery and cooking to the lower, middle and the high school classes. Importance of Models, Charts, Pictures and Diagrams and experiment as an aid to the teaching of House-craft. Principle to be observed in framing schemes and syllabuses. House-craft laboratory equipment.

Nursery School Education—Importance of Nursery School Education to the children, Equipment of the Nursery School. The comparative study of nursery school education with other schemes as Montessori, Kindergarten, etc.

The method of teaching, language and numbers to the young children. Importance of music, story-telling, play, toys, etc. to the children in the nursery school age and their educative value. Methods of handling different types of children.

Special Courses

(Detailed syllabuses are omitted)

7. *Utkal University*: The regulations of this university (which provides the Dip.Ed. Course) are given below:—

1. (a) Any registered candidate may be admitted to the Diploma in Education examination not less than one year after passing the B.A., or B.Sc. examination, or an examination recognised by the Academic Council as equivalent thereto, if he has completed a regular course of study in a training college or colleges admitted for this purpose and has undergone a course of practical training in one or more schools approved by the Syndicate for the purpose.

(b) Any registered candidate who has completed at least five years as a teacher in a secondary school and has obtained the Secondary Teachers' Certificate of the Cuttack Training College may be admitted to the Diploma in Education examination as a private candidate on the recommendation of the Principal of that college.

(c) Any registered candidate who has passed the Teachers' Certificate examination from a Secondary Training School in Orissa and is a graduate be admitted to the Diploma in Education examination as a private candidate, provided he has served as a teacher in a secondary and/or Training School for three years.

2. (1) The course of study shall extend over one academical year, and shall comprise the following subjects :—

(i) History of Educational Practice ;

(ii) Principles of Education ;

(iii) Methods of Teaching ;

(iv) Hygiene of the School Child ; and

(v) Practical Teaching.

(2) The course of practical training shall comprise demonstration, criticism and practice-teaching lessons ; also instruction in clear speaking, good reading and the use of teaching apparatus.

(3) In the theoretical portion of the examination there shall be one paper of three hours' duration carrying 100 marks in each of the first four subjects mentioned in clause (1) of this Regulation. Alternative groups of questions may be set for those candidates who are being tested as to fitness for work in secondary and in primary schools respectively.

(4) The practical examination for testing skill in secondary teaching shall be held at a recognised school in Cuttack and at such other places as the Syndicate may determine. Each candidate shall prepare schemes of work extending over one term in three subjects selected by him from the curriculum of a recognised secondary school, and shall submit full notes of a lesson in each of the subjects selected. The candidate shall be required to deliver one or more of the three lessons. The practical examination shall carry 400 marks, of which 100 shall be for skill in the use of teaching apparatus and 100 for correct pronunciation and clear enunciation.

(5) The practical examination for testing skill in primary teaching shall be held at a primary school in Cuttack and at such other places as the Syndicate may determine. Each candidate shall prepare a scheme of work extending over one school term of three months in each subject of the primary curriculum and full notes of one of the lessons in each subject included in each scheme of work. Two of the notes of lessons shall illustrate the handling of two different classes in two different subjects during one teaching period. The candidate shall be required to deliver one or more lessons in the vernacular. The allotment of marks shall be as in clause (4) of this Regulation.

3. (1) In order to pass the Diploma in Education examination, a candidate must obtain 36 marks in each of the subjects mentioned in sub-clauses (i), (ii), (iii) and (iv) of clause (1) of Regulation 2 of this Chapter and 160 marks in the practical examination. Candidates who obtain 480 marks shall be declared to have passed with distinction :

Provided that any candidate who has failed in one subject only and by not more than 5 per cent of the full marks in that subject, and has obtained 50 per cent in the aggregate of the marks of the examination, shall be allowed to pass, but shall not be eligible for distinction.

(2) The records of the practical work of each candidate shall be inspected by the practical examiner and, if such records are found to be unsatisfactory, the candidate shall be disqualified.

SYLLABUS

Secondary Education Course

Paper I—History of Educational Practice.

Part I. A Short History of Indian Education.

The evolution of British educational policy in India, official documents on the subject.

The present state of primary and secondary education in India and specially in the province of Orissa (for both boys and girls) their defects, suggested reforms.

A very brief survey of other fields of Indian education, University, Technical, Oriental, Vocational, at the present time.

Post-War Educational Development in India.

Part II. A Short History of Western Educational Thought and Practice, dealing particularly with Locke, Rousseau, Postalozzi, Herbert, Froebel, Montessori, Spencer, Dewey.

A brief account of the national system of education in England and the United States.

Paper II—Principles of Education

Relation between principle and practice, psychology and education, fundamental aims and concepts, horme and mneme, stimulus and res-

ponse, modes of consciousness, the unconscious, the subconscious, mental conflict, repression, sublimation, instincts, heredity, habit, play, imitation and suggestion, group psychology, the thinking process, attention and interest, memory, volition, moral training, emotion and sentiment, mental tests, individual differences, a broad view of mental development in the individual and the race, the educative process as a whole.

Place and importance of adolescence, pre-adolescence, physical, mental, moral and social characteristics of adolescence, educational applications in the school and outside ; special bearing upon curricula and methods of teaching.

Paper III—Methods of Teaching

(English, Mother-tongue, History, Geography, Science, Mathematics, are the subjects provided. Detailed syllabuses are omitted.)

Paper IV—Hygiene of the School Child

The human body, how it works, the skeleton and muscles, the circulatory, respiratory, digestive and nervous systems. The senses and the sense organs.

The relation of education to hygiene. The general laws and factors influencing growth, physiological, anatomical, and mental ages. The hygiene of posture for school children, malnutrition, causes and effects. Hygiene of mouth and nose. Defects of vision and auditon, preventive mental hygiene and education of the nervous child. Speech defects and hygiene of the voice. Physical exercise, rest and sleep.

Parasites :—Diseases caused by parasites—Intestinal worms—Mosquitoes—Filaria—Malaria—House-fly—Skin diseases—Communicable diseases and their prevention, small-pox, chicken-pox, measles, whooping-cough, mumps, diptheria, lung diseases, pneumonia, pleurisy, cholera, typhoid, diarrhoea and dysentery, venereal diseases, practical disinfection of houses and materials.

Air, air-borne diseases and ventilation. Water and waterborne diseases. Purification, supply and storage of water. Food, its composition, quantity, balanced diet and cooking and preservation of food. Cleanliness and personal hygiene. Clothing. Sex hygiene.

Climate in relation to health, temperature, humidity, sunshine and winds.

Sanitary location of school-building and hostels. Conservancy—collection, removal and disposal of rubbish and filth. Village sanitation.

ITEM No. 5(c) ON THE AGENDA

Training of Undergraduate Teachers in India for Service in Secondary Schools

In order to discuss the various problems connected with the training of undergraduate teachers for service in secondary schools, it is essential to study the existing provision made in this respect in the different parts of the country.

Assam

There is no provision for the training of undergraduate teachers.

West Bengal

The Education Department does not provide any course for the training of undergraduate teachers, nor does it conduct any examination for them.

The only agency to train undergraduate teachers, therefore, is the Calcutta University. It provides courses leading to the following examinations :—

1. The L.T. Examination ;
2. English Teachership Examination ; and
3. Teachers' Training Course (General) Examination.

The University also conducts a course for the Teachers' Training Certificate (Geography) examination. As a rule, only graduates are admitted to this course ; but in exceptional cases, undergraduate candidates who had Geography in their I.A. or I.Sc. examination may be admitted to it. Even for the Teachers' Training Certificate (General) Examination, admission is ordinarily granted to graduates only, although the regulations provide for the admission of undergraduate candidates. Therefore, the principal courses for the training of the undergraduate teachers are those leading to (1) the L.T. Examination, and (2) the English Teachership Examination.

Regarding these courses, Prof. J. M. Sen, the Head of the Department of Education in the Calcutta University, writes :

" (*a*) If suitable candidates are forthcoming then only two colleges in West Bengal prepare them for the L.T. Course (for undergraduate teachers), viz. (i) Loreto House, Calcutta, and (ii) Union Christian Training College, Berhampur (Dist. Murshidabad). These two colleges also teach the B.T. course.

(*b*) The T.T.C. classes are periodically organised by the Teachers' Training Department of the University of Calcutta. Only a few undergraduates used to be admitted to the T.T.C. Course (General). The T.T.C. Courses in Geography and Science were meant for Graduate teachers. These two courses have now practically been merged in the B.T. Course for those who specialize in these two subjects.

(*c*) English Teachership Certificate Examination was instituted when vernacular became the medium of instruction in all subjects other than English upto the Matriculation standard and the University felt that the then undergraduate teachers (i.e. those who were serving in 1935) should be called upon to pass the English Teachership Certificate Examination in order to make them eligible for teaching English. This course was therefore organised for a number of years and then abandoned as the need for it ceased. The course may again assume some importance when the Board of Secondary Education starts functioning from 1951. Hence the regulations relating to the Examination have not been deleted."

1. LICENTIATE IN TEACHING

1. Any candidate may be admitted to the examination not less than one year after passing the Intermediate Examination in Arts or Science, provided he has attended a regular course of lectures on the Art and Theory of Teaching in a College or Colleges affiliated in teaching and in addition, has undergone a course of practical training as indicated in Rule 6 below.

2. The theoretical portion of the course shall consist of the following subjects: (1) Principles of Education, (2) Methods of Teaching and School Administration, (3) History of Education, (4) English Composition.

3. There shall be a written examination in each of the subjects (1), (2), (3) and (4) and a practical examination for testing skill in teaching. The practical test shall consist of a lesson or lessons to be given by each candidate to a class or classes at some recognised school. Each candidate shall select three of the following subjects and prepare one 'Notes of a Lesson' in connection with each of them. The examiners shall decide which of the lessons prepared by the candidate shall be given by him.

(1) English.
(2) Vernacular.
(3) A Classical or a Modern Language.
(4) History.
(5) Geography.
(6) Mathematics.
(7) Science or Nature Study.
(8) Hygiene.
(9) Art or Manual Work.
(10) The Kindergarten System.
(11) Methods of Teaching and testing the Primary School subjects. Methods of Inspection.
(12) Music.

4. There shall be one paper in (1), two papers in (2), one paper in (3) and one paper in (4). Each paper shall be of three hours' duration, and shall carry 100 marks. 300 marks shall be allotted to the practical examination. In order to pass, a candidate must obtain 40 per cent in each of the subjects (1), (2), (3) and (4), and also in the practical examination; and candidates obtaining 60 per cent of the total marks shall be declared to have obtained a First Class and candidates obtaining between 40 per cent and 60 per cent of the total marks shall be declared to have obtained a Second Class. The list of both classes of successful candidates shall be published in order of merit. Letters shall be affixed to the names of candidates who obtain 80 per cent in any of the special subjects or in practical teaching.

Provided that the candidates who pass the theoretical and the practical portions of the examinations separately under Section 7 shall be declared to have passed the examination when they have passed in both portions of the examination.

A fee of Rs. 30 shall be payable by every candidate. If the candidate fails to pass or to present himself at the examination, he shall not be entitled to claim a refund of the fee.

5. The limits of the different subjects shall be as follows:—

I—Principles of Education

The meaning of Education. The aim of Psychology. The relation of Psychology to Education.

Descriptions of the nervous system and its functions. Sensation, perception and conception. Memory and imagination. Interest and attention. Relation of language to thought. The formation of clear and connected ideas. Fatigue and boredom. The mental development of the child and the adolescent.

Instincts and their relation to children's interests. Feeling and its expression; emotions and sentiment; pleasure and pain.

The forms of activity and of expression. The function of play. Suggestion, limitation and habit. Development of will, conduct and character. The application of Psychology to the teaching of the school subjects.

II. Methods of Teaching and School Administration

The general principles and methods of teaching and their application to the subjects included in the curriculum of secondary schools.

Functions and characteristics of a good school, order and discipline. Free discipline, authority and influence of the teacher. Punishments and rewards. Relation of guardians and teachers. Qualifications and duties of the staff. The specialist and the class master. The problem of individual differences.

Classes and classification of pupils. The curriculum and the time-table. Practice exercise. Tests, Marks, school and public examinations. Promotions. The school library. Home work and private tuition. The school furniture and apparatus. The museum, school gardens. The school office and records.

The hostel and its management.

III. History of Education

(i) Modern developments in education in Great Britain.

(ii) Education in Modern India with special reference to Bengal.

IV. English Composition including Translation, Essay-writing, etc.

6. *Practical Skill in Teaching.*—Systematic provision shall be made for enabling students to see lessons being given by teachers of special competence and experience. Criticism lessons shall be conducted with small groups of students.

Each student shall give a number of lessons in approved schools under supervision. The number of lessons may be decided by the Principal of the College but may in no case be less than 40. The greater part of this practice should be of continuous nature. 40 per cent of the marks for the practical examination shall be allotted by the Principal of the College for these practice lessons given during the course. All lesson note-books shall be available for the examiners.

7. A candidate may present himself for the theoretical and practical portions of the examination separately, provided that the interval

between the two does not exceed two years. If the interval exceeds two years, both the theoretical and practical portions of the examination shall be taken together.

8. Books shall be prescribed from time to time by the Syndicate on the recommendation of the Board of Studies in Teaching.

2. ENGLISH TEACHERSHIP CERTIFICATE

1. A candidate for the examination must have passed the Intermediate Examination and have served in a recognised school as a teacher for at least one year prior to the examination. Provided, however, that if the candidate has already graduated in any Faculty he will be allowed to appear at the examination without being required to serve as a teacher.

A candidate shall also produce a certificate to show that he has undergone for at least eight weeks (which need not be consecutive) a special short course of training organised or recognised by the University for the purpose. Until further orders attendance at the short training course for three months organised by the University with Methods of teaching English as one of the subjects will be considered sufficient for purposes of his admission to the examination.

2. The examination shall be written, oral and practical, and shall be conducted on the lines of the following syllabus :—

(A) Written Examination 150 marks.

There shall be one paper with two halves each of two hours and each carrying 75 marks.

The subject for the written examination shall consist of—

(i) Method of teaching English in India.
(ii) Elementary Phonetics of English.
(iii) Detailed knowledge of English Grammar.
(iv) English Composition in the form of short essays on subjects occurring in a number of selected texts and translation.

The marks for the written paper shall be distributed as follows :

	Marks.
First half—	
Method of teaching English	50
Phonetics	25
Second half—	
Grammar	25
Composition	30
Translation	20
	150

(B) Oral Examination 150 marks.

The oral examination will be held mainly with a view to testing the candidate's ability to read English Prose and Poetry and his ability to carry on an ordinary conversation in English.

(C) Practical Examination 200 marks.

The practical examination will be held with a view to testing the candidate's ability to teach English in any of the classes of a recognised high school.

Note 1.—Special regulations for persons who had been teachers in recognised high schools on 31st March 1935.

Notwithstanding anything contained in the foregoing rules, all persons who had been teachers *in English* in recognised high schools on 31st March 1935, will be entitled to appear at the English Teachership Certificate Examination after having undergone training as specified above.

Note 2.—Exemption from written portion of the examination.

(1) The following teachers who have been in service in recognised schools on 31st March 1935 shall be exempted from appearing at the written portion of the examination:—

(i) Head Masters of recognised schools.

(ii) All Assistant Head Masters and assistant teachers who have served as teachers of English in recognised schools.

(2) Graduates who obtained not less than 50 per cent marks in the aggregate in English in their B.A. Examination may also be exempted from appearing at the written portion of the examination even if they have not served as teachers.

THE TEACHERS' TRAINING CERTIFICATE (GENERAL)

1. A candidate for the examination must have passed the Intermediate Examination and have served in a recognised school as a teacher for at least two years prior to the examination. Provided, however, that if the candidate has already graduated in any Faculty with Honours or Distinction, or has obtained the Master's Degree he will be allowed to appear at the examination without being required to serve as a teacher.

He shall also produce a certificate to show that he has undergone for at least three months a short course of training organised or recognised by the University for the purpose.

2. A candidate who fails to pass or appear at the examination immediately following the completion of his term, may be admitted to two subsequent examinations on payment of the prescribed fee on each occasion without undergoing any further course of training, provided that a candidate who fails in the practical and oral examinations will

be required to produce a certificate of practice-teaching in a recognised High School from the head of the institution.

If such a candidate desires to appear at any subsequent examination other than the two mentioned above, he shall be required to undergo a fresh course of training for the full period in accordance with these regulations.

3. (1) Every candidate shall be examined in the following subjects :

(i) General Principles of Education—One paper.

(ii) Educational Psychology—One paper.

(iii) Education in Bengal and Assam—One paper.

(iv) and (v) Methods of teaching school subjects. Any two of the following school subjects to be selected by the candidate, viz. English, Bengali, Assamese, Mathematics, History and Hygiene. — One paper each.

Each paper shall be of three hours and shall carry 100 marks.

(2) There shall also be a Practical and Oral Examination to which 100 marks shall be assigned. 50 marks shall be assigned to practice-teaching, lesson notes and tutorial work.

SYLLABUS

I

General Principles of Education

The meaning of philosophy of education.

The function of education in the biological record.

The meaning and aim of education. Comparative study of different aims of education.

Factors of education : pupil, teacher, curriculum and educational environment.

Child-centric education : its brief history and significance.

Material for education : the child ; his nature and nurture.

General laws of learning and habit formation.

Educational agencies. School, its position and function.

Need for co-operation of different educational agencies.

Curriculum ; principles of curriculum construction.

Subjects in curriculum. Extra-curricular activities.

Methods of education.

Individual work. Kindergarten. Montessori Method.

Dalton Plan. Playway in education.

Project Method and correlation of studies.

Discipline and punishment.

School community.

Teaching and lesson notes.

Tests and examinations.

II

Educational Psychology

A : *Introduction*

Psychological aspect of education.

Scope and methods of Educational Psychology (including statistical methods).

Physiological basis of mind: Sense organs, muscles and the nervous system.

Nature of mind.

Different mental functions and their inter-relations.

General mental development: Conditions—Heredity and Environment.

B : *Original Nature*

Reflexes, Instincts and Emotions.

Educational bearings of Instincts.

Psychology of the Adolescent.

Basis of character-training.

Intelligence: Theories and Methods of Measurement.

Mental Tests.

C : *Modification of Original Nature*

Learning: Animal and human learning.

Laws of learning.

Learning Curve: Acquisition of skill and memorisation.

Fatigue in learning; Transfer of training.

Measurement of learning; Examination; Scholastic Tests.

D : *Guidance of Learning*

Discipline.

Exceptional and 'problem' children.

Psychological foundations of some prevalent systems of education.

Psychology of the class-room methods.

Practical work.

Students are expected to be familiar with the following:—

(1) Simple Sensory and Motor Tests.

(2) Intelligence Tests.

(3) Learning curve.

(4) Tests for determination of Memory Span.

(5) Word association test.

III

EDUCATION IN BENGAL AND ASSAM

(Its History, Organisation and Administration)

Education as prevailing prior to 19th century.
Early beginnings of Western education.
Macaulay's Minute: Bentinck's Resolution.
Adam's educational survey and report.
Primary Education: Harding's schools.
Educational Despatches of 1854 and 1859.
Attempts at imposition of educational cess.
Education Commission of 1882.
Promotion of education through local self-governing bodies.
Curzon's educational policy: the Indian Universities Act of 1904.
Attempts at introduction of compulsory primary education.
Indian Educational Policy of 1913.
Calcutta University Commission.
Higher Teaching and Research in Calcutta.
Dacca University and Board of Intermediate Studies.
Bengal Primary Education Acts of 1919 and 1930 and Assam Presidency Education Act of 1926.
Education of women and girls.
Present position of secondary education in Bengal and Assam, its organisation, administration and problems.

IV AND V

Detailed study of the methods of teaching two of the following school subjects:—(*a*) English, (*b*) Bengali, (*c*) Assamese, (*d*) Mathematics, (*e*) History, and (*f*) Hygiene.

(Detailed syllabuses are omitted here.)

4. In order to pass, a candidate must secure 36 per cent of the marks in each of the theoretical papers, and 40 per cent of the marks in the practical examination and 40 per cent of the aggregate. If he passes, and obtains 60 per cent of the aggregate, he shall be declared to have passed with Distinction.

BOMBAY

In Bombay, the task of training undergraduate teachers is done partly by the Department of Education and partly by the Universities.

S.T.C. EXAMINATION

The Education Department conducts an examination, known as the S.T.C. Examination, whose rules and syllabus are as follows :—

1. *Introduction.*—In order to encourage teachers, and especially undergraduate teachers, in secondary schools to improve their professional qualifications, the Educational Department of Government will hold an Examination once a year for the award of Secondary Teachers' Certificates. The examination will be in two parts : viz. (i) Theoretical (written) and (ii) Practical.

2. *Eligibility.*—The examination will be open to candidates who have passed the Matriculation Examination of a recognised University or any other examination accepted by the Department as equivalent to the Matriculation Examination of the University of Bombay, provided they have completed the age of 18 years on or before 1st May of the year in which they appear for the Examination in Part I, and subject to the following conditions :—

(*a*) that they have worked for a total period of not less than nine months (excluding vacations) before the date of examination in a secondary school or (schools) recognised by the Department or by an Indian State within the territorial jurisdiction of the University of Bombay,

or

(*b*) that they have undergone an approved course of instruction extending over two terms at a secondary training institution or class specially recognised by the Department for the purposes of the Secondary Teachers' Certificate Examination, and have kept at least two-thirds of the total attendance at lectures, etc. with a minimum of 60 in each term.

N.B.—These periods need not necessarily be immediately before the examination at which the candidate wishes to appear.

3. *Practical Lessons.*—Each candidate must give, before his first appearance at the Examination in Part I, under the supervision of a teacher approved by the Inspector/Inspectress concerned, at least 25 lessons (reasonably distributed over ordinary school subjects—not less than three and not more than four in number). Not more than two lessons should be given in any one week and not more than fifteen in any one term.

A certificate showing that these conditions have been fulfilled must be sent along with each application for admission to the Examination.

N.B.—(1) For the purposes of these rules the following are regarded as ordinary school subjects :—

Regional languages (Marathi, Gujarati, Kannad, Urdu), English, History, Geography, Mathematics, Science.

N.B.—(2) The Observation Note Book used at the Secondary Training College, Bombay, is suggested as a guide for the criticism of lessons (*see* Appendix B).

4. *Certificate of Character, etc.*—Each candidate must produce a certificate to the effect that he bears a good character and is capable of maintaining discipline in class.

5. *Subjects of Examination.*—(*a*) In Part I three papers (of 3 hours each) will be set as under :—

Paper I.—Elementary Principles of Education.

Paper II.—(*a*) School Organisation and Hygiene.

(*b*) General Methods.

Paper III.—Special Methods (candidates to answer questions on not less than two and not more than three school subjects).

(*b*) The Examination in Part II will be conducted with special reference to :—

(1) Accuracy and quality of matter with reference to the class taught.

(2) Power of clear exposition and skill in questioning.

(3) Language, including articulation, pronunciation, and suitability to class.

(4) Management of pupils and power of maintaining discipline.

(5) Proportion of matter taught to time given.

(6) Use of blackboard.

N.B.—(I) Candidates will be required to give not more than two examination lessons, but proficiency in teaching may be judged on the strength of one lesson only. The ordinary school subjects (*vide* rule 4) in which lessons will be given in Part II will be selected by the examiner from amongst these in which candidates have already given their practice lessons.

(II) As far as possible, candidates will be asked to give their examination lessons in the classes which they usually take.

6. *Standard for Pass.*—The maximum number of marks for each paper in Part I will be 100 and that for Part II will be 200. To pass the Examination candidates must obtain at least 50 per cent in each Part. Those who obtain *at the first attempt* 70 per cent of the aggregate of Parts I and II will be declared to have passed "with distinction".

7. *Syllabus*: The following books are recommended :—

Text-Books

Paper

1 The Theory and practice of Education, by Catty (Methuen).

2(*a*) Suggestions for the Organisation of Secondary Schools in India, by Ryburn (O.U.P.).

2(*b*) The Approach to Teaching. Ward and Roscoe (Bell).

3 No texts are prescribed for this paper: a few books, however, are entered in the following list:—

Supplementary Books

1 Learning and Teaching, by Hughes and Hughes (Longmans).
Recent Developments in Educational Practice, by Adams (L.U.P.).

2 Instruction in Indian Secondary Schools, by Macnee (O.U.P.).
Handbook of Suggestions for teachers (H.M.O.).

3 Lectures on Teaching English in India, by Champion (O.U.P.).

Suggestions for the Teaching of the Mother-tongue in India by Ryburn (O.U.P.).

Geography in School, by Fairgrieve (L.U.P.).

Suggestions for the Teaching of History in India, by Ghate (O.U.P.).

Teaching of Elementary Mathematics, by Godfrey and Siddons (Macmillan).

Teaching of Science in Schools, by Brown (L.U.P.).

Teaching of Biology, by Poulton (Methuen).

T.D. EXAMINATION

The Universities of Bombay, Baroda, Karnatak and Poona conduct a T.D. Examination whose regulations are given below:—

1. No candidate shall be admitted to the examination for the Diploma in Teaching unless he has passed—

(*a*) the Entrance Examination of this University or an examination recognised as equivalent thereto, and subsequently has obtained teaching experience for a period of not less than three years in a School recognised by this University;

(*b*) the First-Year Examination in Arts, Science or Commerce of this University or the Intermediate Examination in Arts, Science or

Commerce of any other University or examining body recognised by this University.

2. Every candidate for admission to the examination for the Diploma in Teaching will be required to produce a certificate (*a*) of having kept two terms (each of 65 days) at a College affiliated to this University for the Diploma in Teaching and (*b*) of having completed the prescribed course of practical work, to the satisfaction of the head of the College, consisting of

(i) attendance at demonstration lessons;

(ii) observation of directed teaching;

and

(iii) teaching practice of 30 practice lessons, 10 in each of the *three* subjects of his own choice from the following:—

(1) English,

(2) Other language (Marathi, Gujarati, Kannada, Sindhi, Urdu, Hindi or Hindustani),

(3) History,

(4) Geography,

(5) Mathematics,

(6) Science.

Candidates for the Diploma shall be required to produce a further certificate from the Head of their College that they have completed to his satisfaction a course in *each* of the following:—

(*a*) Physical Training and Instruction,

(*b*) Blackboard Work,

(*c*) Phonetics.

3. The examination for the Diploma in Teaching shall consist of:—

Part I—Written Examination—Four papers.

Part II—Practical Examination—Two lessons.

4. Candidates may appear in both Parts simultaneously or in either separately. Applications for permission to appear for the examination either in Part I or Part II or both shall be made on or before a fixed date and on a form prescribed by the Syndicate and shall be accompanied by a fee of Rs. 15 for Part I, Rs. 10 for Part II and Rs. 25 for Parts I & II together, per candidate.

5. Candidates shall be examined in—

Part I

Paper I—Elementary Principles of Education and Psychology.

Paper II—Special Methods.

Paper III—General Methods, School Hygiene and School Administration.

Paper IV—An Outline of Twentieth Century developments in Indian Education and Educational Administration in the Province of Bombay.

In the Papers of Methods—General and Special—candidates shall answer questions on the Methods pertaining to the subjects selected by them for Part II.

Paper I: Elementary Principles of Education and Psychology

Sec. I: Principles of Education.

1. Aims of Education; Social and Individual Aim; Meaning of Individuality; the Education of the Whole Man; Formation of Character; Education and Culture; Education and Adjustment.
2. The Educational Outlook; School, Society and the Individual. Education as related to Nationalism and Internationalism.
3. Different Aspects of Education; Education for Leisure; Educacation for Vocation; Education for Citizenship.
4. Data of Education; the Educand—the Nature of the Educand—the Influence of Environment: Heredity and Environment.
5. Principles of Learning; Laws of Learning.
6. The Teacher; the Teacher's Place in Education. Qualifications and Personality of the Teacher. Child-centric Education and the Teacher as the guide, overseer and superintendent.
7. The Curriculum; Correlation of Studies: Extra-curricular Activities.

Sec. II: Elementary Educational Psychology.

1. Psychology and its bearing on Education. The Old (subjective) and the New (objective) Methods of psychological study.
2. Instincts: McDougall's Theory of relation between Instinct and Emotion; Sublimation of some instincts of special importance in schools.
3. General Innate Tendencies; Sympathy, Imitation and Suggestion; Psychology of the Group; Play and Play-way in Education.
4. Products of Development; Habits, Complexes, Sentiments and Character; the Will.
5. Stages of Child-development. Adolescence.
6. The Psychology of the Unconscious. Difficulties in Development—Behaviour Problems.
7. Doctrine of the Transfer of Training.
8. Psychology of Attention and Interest; and its bearing on Education.

9. Memory and its training. Remembering and Forgetting.
10. Sensation and Perception, Image and Imagination, Reasoning.
11. Individual Differences: the implications for school work.
12. Intelligence and its nature.

Paper II: *Special Methods*

(Detailed syllabuses are omitted here)

Paper III: *General Methods, School Hygiene and School Administration*

Section I: *General Methods.*

1. Foundations of Method—Maxims of Method: lesson-planning and notes of lessons.
2. Types of lessons—determined by aim; Inductive; Deductive; Drill; Review; Appreciation.
3. Devices of Teaching—Assignments; Questioning; Exposition; Illustrations (verbal and concrete); Black-Board; Text-book; Home-work.
4. Devices of Testing—Tests, Marking, Examinations (essay type, new type) Promotions.
5. Class—Class *vs.* Individual Teaching; Securing and maintaining attention; Teachers—his demeanour, voice and movements; How to study; Correlation of studies Lesson-units; Discipline in class-room.
6. Modern Developments—Montessori & Kindergarten Methods, Project Method; Dalton Plan and Supervised study.

Section II:

(*A*) *School Hygiene.*

1. Physical Education in relation to the health of the Child.
2. Healthful school conditions:
   The site of the school—the school building—the class-room lighting, ventilation, sanitation and water supply; drinking water; washing and lavatory arrangements; School equipment —the problem of postures; the Boarding house; the play-ground.
3. Health service and supervision:

   Medical inspection—school clinics—care of skin, eyes, ears and teeth—signs and symptoms of infectious and contagious diseases peculiar to India—fatigue, mental and physical—mal-nutrition and its evil effects.

(*B*) *School Administration*:

1. Social Aspects of School Life:

   (*a*) The social life of the school and its nature.

   (*b*) Organisation and government of the social life in school.

(c) School Discipline.

(d) Civic and Moral instruction.

(e) Religious instruction.

(f) Rewards and Punishments.

2. Academic Aspect of School Life:

(a) Admission, classification and promotion of pupils.

(b) Teachers and classes: Subject teacher and Class teacher: rotation of teachers.

(c) Curriculum.

(d) Time-table.

(e) Home-work.

(f) Examinations.

3. General:

The Headmaster and his assistants: parental co-operation. School inspection. School records.

Paper IV: An Outline of Twentieth Century developments in Indian Education and Educational Administration in the Province of Bombay

Section I: An Outline of Twentieth Century developments in Indian Education.

1. State of Indian Education at the beginning of the Twentieth Century.
2. Pre-Primary Education.
3. Growth of compulsory Primary Education.
4. Basic Education and Adult Education.
5. Growth of Secondary Education—academic and vocational.
6. Education of Girls.
7. Growth of Higher Education.
8. Training of Teachers.

Section II: Educational Administration in the Province of Bombay.

1. Controlling Authorities.
2. The Education Department.
3. University.
4. Local Authorities.
5. Private Agencies—their functions and relations with one another.

PART II

Practical Examination

6. In Part II of the examination the teaching ability of candidates shall be judged by a test in two lessons, in any two out of the three

school subjects selected by the candidates for practice lessons.* They will be tested in their practical skill in class management as well as in class teaching. They will be required to produce for inspection by the Examiners : —

(a) A diary of demonstration and directed lessons observed.

(b) A journal containing notes of lessons given, together with the observations on these lessons by the Master of Method.

1. English, 2. Marathi, 3. Gujarati, 4. Kannada, 5. Sindhi, 6. Urdu, 7. Hindi.

7. The total marks for the examination shall be 400 for Theory and 200 for Practical. Each Paper in Part I (Theory) shall carry 100 marks and be of three hours' duration and each lesson in Part II (Practical) shall carry 50 marks. For Practical work done by the candidate during his period of training, marks upto a maximum of 100 (half of the marks allotted for Part II) shall be assigned by the Professor of Education in the College in which the candidate has been studying. Marks so assigned may be revised in the case of candidates who fail to pass the University examination and apply for such revision, provided that they give under the supervision of the College authorities ten additional lessons in teaching practice to the satisfaction of the Head of the Institution, not more than three such lessons being given in any one week.

8. A candidate obtaining 40 per cent or more of the total marks separately in Part I and in Part II shall be declared to have passed the examination.

A candidate obtaining 65 per cent or more in the aggregate and not less than 50 per cent in Part II shall be declared to have passed with distinction.

The Syndicate may frame rules from time to time for the condonation of deficiencies in the marks obtained by candidates in either Part of the examination, and to declare such candidates successful.

A candidate who has passed in either of the Parts of the examination may be exempted, at his option, from appearing therein at a subsequent attempt, but a candidate availing himself of such exemption shall not be eligible for distinction.

MYSORE

In Mysore State, the training of undergraduate teachers is done by the Education Department. There are three institutions which prepare candidates for this course : —

(1) The Government Training College for Men, Mysore.

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* In all subjects, except English, candidates have the option to give practice lessons and answer their papers in one of the following languages : —

(2) The Maharani's Training College for Women, Mysore.

(3) St. Euphrasia's Convent, Bangalore Cantt. (for women only).

The regulations and the syllabus are given below :—

1. The Examination for the *Undergraduate Training Certificate* in English shall be of one Grade, viz. Secondary Grade.

2. The Examination shall be conducted in English in two parts, called the Theory (Preliminary) and the Practical Examinations, respectively, the former being Written and the latter Oral and Practical.

Theory Examination

3. The examination shall be open to those who besides possessing the minimum general educational qualifications (*vide* para 5), have either (1) gone through the full training course in a recognised training institution and been permitted by the Head of the Institution to appear for the examination or (2) have appeared for the examination once or more often and failed to secure a pass.

Note.—(1) Students of a recognised Training Institution who have not been permitted by the Head of the Institution to appear for the examination in a particular year may not present themselves for it in the same year. They may, however, appear as private candidates in succeeding years, but in that case, the application for admission to the examination should be submitted through the Head of the Training Institution in which the candidate underwent training.

(2) Teachers in recognised schools who have put in five years of approved service or more and who had no chance of being deputed for training by the department may be admitted to the Examination—by private study, subject to the condition that they possess the minimum general qualifications as in Clause 5 of the rules, provided that applications for admission to the examination are accompanied by certificates issued by the Inspecting Officer in direct charge of the school to the effect that the teacher possesses the minimum general educational qualification prescribed therefor, that he has put in five years of approved service in recognised schools, that he has been adopting approved methods of teaching in the school and that he is fit to take the examination by private study.

4. Candidates for the examination shall have obtained the completed Secondary School Leaving Pass Certificate or have matriculated at an Indian University or have passed an examination higher in standard than or equivalent to the Mysore Secondary School Leaving Certificate Public Examination.

5. (1) The examination shall commence in Mysore and in such other centres as may be notified from time to time, on the 1st March or, if

that day should be a holiday, on the first subsequent working day, and shall be conducted in the following order:

First Day: 11 a.m. to 2 p.m.—Principles of Education.

Second Day: 11 a.m. to 2 p.m.—Methods of Teaching.

Third Day: 11 a.m. to 2 p.m.—School Organisation and Discipline.

(2) The maximum marks allotted to each paper shall be 100. Candidates obtaining (*a*) not less than 35 per cent of the marks in each paper or (*b*) 30 per cent of the marks in each paper and 40 per cent of the aggregate number of marks of all the three papers taken together shall be declared to have passed the Theory Examination.

(3) Candidates that pass shall be classified as follows:—

(i) First Class.—Candidates who obtain 60 per cent or more of the total marks.

(ii) Second Class.—Candidates who obtain 50 per cent or more of the total marks.

(iii) Third Class.—All the other candidates that have passed.

(4) Successful candidates shall receive the Teachers' Certificate, Preliminary Examination, if they should fail in the Final Examination.

(5) The text-books to be studied shall be prescribed from time to time and their names shall be published in the Mysore Gazette.

SYLLABUS

Paper I Principles of Education

A. 1. Psychology in relation to the child and its development.

2. Physical basis of mental life, a general knowledge of the structure and functions of the Nervous System.
3. Heredity and Environment.
4. Instincts, their nature, characteristics and education: The role of instincts in habit-formation.
5. The senses; purpose and methods of sense training.
6. Sensation: Association and Perception; Observation and Perception; Conception and Apperception.
7. Imagination; Imagery.
8. Imitation, Suggestion, Play; Attention, Interest and Effort.
9. Memory; Thinking; Reasoning; Judgment.
10. The Emotions; their nature and training.
11. Volition: the question of freedom.
12. Individuality.

B. 1. The Laws of Learning.

2. Fatigue—Physical and Mental.

3. Intelligence-tests; their purpose and achievements.

C. 1. Broad and narrow meaning of Education.

2. Relation between Life and Education.

2. Aims of Education:—

Narrow aims: Mind—Body; Intellect—Character.

Practical Efficiency—Personal Culture, Knowledge—Mental Power.

Comprehensive aim: Harmonious development of the individual; "Personal and Social growth".

Aims in terms of human wants—

(*a*) Personal equipment—

1. Physical health.
2. Mental health and balance.
3. Intellectual resources.
4. Recreational resources.
5. Ethical and religious resources.

(*b*) Adjustment to situation in modern life—

1. Adjustment to the physical world.
2. Adjustment to the economic situations.
3. Adjustment to the family situations.
4. Adjustment to the social situations.
5. Adjustment to the civic situations.

3. The agencies of Education—

The Family.

The Community.

The Religious Institution.

The State.

The School.

The functions of the School: The School as a miniature World.

The Functions of the Teacher: Qualifications of a Teacher.

His personality. Education as a tripolar process.

The child as the "Centre".

4. Data of Education: Innate tendencies of the child. The prolongation of human infancy. Modification by Education. Education is Life. Life is Learning. Learnig is Behaving.

5. Material of instruction: The various stages of child development and the curriculum for different stages. Theory of Formal Discipline. Principles of curriculum construction. Curriculum looked upon as a series of purposeful activities or "Projects". No standard curriculum. Curriculum no more fixed than is human life. The respective subjects as related to the larger life purposes; and their correlation.

6. The Method of Instruction: General Principles. Different methods. Modern individualistic tendency.

7. Recent developments in Educational Practice. (*a*) The Project Method. (*b*) The Dalton Plan.

8. The method of Appraisal. Present-day examinations and their defects. The New Type Examination.

Paper II—Methods of Teaching

I. (1) Introduction:
The meaning of Method: Broad and Narrow.

(2) The General Principles of Instruction: Characteristics of a good lesson. The parts of a lesson. The importance of a good beginning. Need for methodical procedure. Summary or Recapitulation. The maxims of method and their uses.

Aids to teaching: Questioning, its varieties and uses, Illustrations, Explanation and Description.

(3) The Chief Methods of Instruction: A brief consideration of the following methods with special reference to their applicability to class-room teaching: Inductive, Deductive, Lecture, Heuristic and Catechetical methods. The Supervised Study and the Dalton Plan.

(4) Notes of Lessons: Meaning, objects and varieties. Outline and full notes. Lesson plans.

(5) The delivery and criticisms of a lesson: The part played by the teacher and the pupils. The use of questioning, illustrations, explanation and description. Maintenance of discipline. How to criticise a lesson.

II. Methods of Teaching the various subjects of the curriculum:

(Detailed syllabuses in Mother-tongue, English, Arithmetic, History, Geography, Elementary Science and Nature Study and Manual Occupations are omitted here.)

Paper III—School Organisation and Discipline

A. School Organisation

(*a*) Meaning and scope; broad divisions.

(*b*) School Hygiene:

1. The School site: Situation and extent, drainage and other hygienic considerations.
2. School building: Size and appearance, rooms and their distribution, the hall and its uses. Lighting and ventilation, the importance of aspect, general plan of school building, maximum use of a school building, modern tendencies towards

open-air condition. The question of open-air schools for India.

3. The Playground: Its need and importance, size and uses, playground classes.
4. School furniture: Importance of hygienic furniture. Seating and desking arrangements in India; old and new. General conditions of good desking, proper arrangement of furniture in the class room.
5. Other aids for preserving the health of children: Home work, Morning sessions, School meals, School journeys, Special schools, etc. What is being done in other lands. (The special services of England. The New-School. Movement in Europe).
6. Common ailments of school children: Their variety, other detection and cure, value of medical inspection of school children. The teacher's responsibility.
7. Direct and indirect means of cultivating healthy habits: The school laws regarding cleanliness in dress and body and their enforcement, games and other physical exercises, the influence of surroundings, the example of the teacher.

(*c*) Equipment:

1. School apparatus: Blackboards, charts, maps, models, pictures, drawings, etc. Pictorial magazines and their value, the magic lantern, the place of cinema in education, importance of museums and gardens as teaching aids.
2. School library: Choice of books, Library organisation and its uses. Library periods. Need for teaching children how to study.
3. School records: The School registers with special reference to the Mysore Educational rules. Their purpose and value. Other useful records.

(*d*) The Staff:

The Staff: Principles of staffing. Personal and professional qualifications of teachers, the Headmaster and his duties, Staff meetings and their value. Need for the co-operation of parents and the public in school work. Parent-Teachers' Associations, Parents Day, School Day, etc.

(*e*) Organisation:

1. Classification of pupils: The class as a working unit, different systems of classification, value of intelligence tests in classification. The problem of Co-education. Modern tendencies in classification.
2. Allocation of work: Class-master *v.* subject-matter. Allotment of classes to teachers, the Headmaster's work as a teacher.

3. The Time-Table : The value and importance of the time-table in organisation, characteristics of a good time-table. Time-table of a single teacher school and fully staffed school. The present movement for a flexible programme.

4. Extra-curricular activities : Their necessity in school organisation. Possible activities in a middle school and their organisation. The Scout movement and its value.

5. Examination and promotions : The present-day cry against examinations. Examinations as a necessary evil. Principles guiding promotions, the promotion of the backward pupil, yearly and half-yearly promotions.

B. Discipline

1. Meaning and scope : Discipline as a means and as an end, the moral aim of discipline.

2. Factors controlling discipline : School surroundings, the school community, laws and regulations of the school, extra-curricular activities, the personality of the teacher, rewards and punishments, their nature and kind. Spencer's theory of natural consequences, the place of corporal punishment in school discipline.

Reform of the wrong-doer : Common school faults and their treatment ; the delinquent types and their reform ; the importance of the 'Objective Attitude' in discipline.

4. Freedom in education : Its meaning and scope. Pupils' self-government and its limitation, recent experiments in the field.

5. Character-Training : An indirect process ; Habit-formation as a basis of character building. The responsibility of the school in this respect. The Home and the Teacher's example. Present-day experiments.

Practical Examination

1. The Practical Examination shall be held about the middle of August each year after the publication of results of the Theory Examination held in March previous. The dates and centres of Examination shall be duly notified in the Mysore Gazette.

2. Each candidate shall be examined by a Board consisting of not less than two members.

3. Candidates appearing for the Practical Examination in any year subsequent to that in which they passed the Premliminary Examination shall forward with their applications for admission to the Practical Examination the certificate of having passed the Theory Examination awarded to them by the Local Examinations Boards.

4. The Examination shall comprise the following tests:

(1) The giving of three lessons of about 40 to 50 minutes each, one of which shall be in any branch of English to be prescribed by the Examiners and the second in one subject to be fixed by the Board of Examiners and the third on any subject included in the Middle School Curriculum at the choice of the candidate provided the subject is not one set by the Examiners for the second lesson or on English. The Board of Examiners shall prescribe the subject and the class to be taught, the actual portion being left to the option of the candidate. The subjects of the lesson test shall be announced by the Examiners at the place of Examination at least two days before the date on which the candidate is to be examined. Total marks for each lesson shall be 50.

(2) Black-board Test:

(*a*) Map Drawing in bold outline with reference to the teaching of Geography and History—20 marks.

(*b*) Rapid sketching such as is required to illustrate any particular situation or situations in the course of teaching a class and such as will involve a combination of any of the elements mentioned below:

(i) Common Plants—Ragi, Jola, Togari, Paddy, Cotton, Sugar-cane, the Vine and Pumpkin.

(ii) Familiar trees—Plantain, Cocoanut, Mango, Tamarind, Banyan and Bamboo.

(iii) Birds—Crow, Cock, Parrot and Peacock.

(iv) Animals—Cow, Horse, Donkey, Goat, Cat, Dog, Monkey, Elephant, Tiger and Cobra.

(v) Natural phenomena—River, Water-fall, Lake, Mountain, Eclipses and Rainbow.

(vi) Common objects of the Home and the School-room.

(vii) Miscellaneous—

1. Bullock-cart, Bicycle, Motor-car and Railway engine.
2. Boat and Bridge.
3. Hut, Tent, Cottage and Tower or Gopura.—Marks: 30.

5. Candidates obtaining (*a*) 35 per cent of the marks in each of the Lesson and Black-board Tests or (*b*) 30 per cent in each of these two tests and 40 per cent on the whole shall be declared to have passed in the examination. Candidates that pass shall be classified as follows:—

First Class.—Those that obtain 60 per cent or more of the total marks.

Second Class.—Those that obtain 50 per cent or more of the total marks.

Third Class.—All the other candidates that have passed.

Successful candidates shall receive the final Teachers' Certificate of the Secondary Grade from the Local Examinations Boards.

6. Candidates passing in the Theory Examination only (*vide* para 6) and failing in the Practical part shall receive a certificate of having passed in the Theory (Preliminary) Examination only which will be exchanged for a completed certificate when the candidate passed in the Practical Examination in subsequent years.

MADHYA PRADESH

In Madhya Pradesh, the Universities of Nagpur and Saugor provide a training course for the undergraduate teachers—Dip.T. Examination course. There are five institutions for training undergraduate teachers and preparing them for this examination :—

(1) Prantiya Shikshan Mahavidyalaya, Jabalpur.

(2) Dip.T. Institute for Men, Khandwa.

(3) Dip.T. Institute for Women, Amravati.

(4) Dip.T. Institute for Men, Amravati.

(5) Dip.T. Institute for Women, Hawabagh, Jabalpur.

2. *Regulations* : The regulations of both the Universities regarding the Dip.T. Examination are the same; but the syllabuses are different.

The common regulations are given below :—

1. Every applicant for admission to the examination shall—

(*a*) Have passed the High School Certificate Examination of the Central Provinces and Berar Board of High School Education or any of the examinations recognised equivalent thereto.

(*b*) Have prosecuted a regular course of study at a recognised institution under the Act for not less than two academic years after passing any of the examinations referred to in clause (*a*).

Any deficiency at attendance at the course of study for the examination may be condoned in accordance with the following provisions :—

(i) The Principal of the College shall send to the Registrar a list of the students who have applied on the prescribed form for admission to the examination but have not prosecuted a regular course of study stating clearly in the case of each student—

(1) the extent of his deficiency in attendance in each subject;

(2) his recommendation as to whether the deficiency should or should not be condoned ; and

(3) the grounds on which his recommendation is based.

(ii) The list shall be submitted to the Vice-Chancellor and in all those cases in which he is able to accept the recommendation of the Principal,

the deficiency shall be condoned or its condonation refused as the case may be, in accordance with the recommendation of the Principal. In such cases the decision of the Vice-Chancellor shall be final.

(iii) Those cases in which the Vice-Chancellor is unable to accept the recommendation of the Principal shall be referred to the Executive Council whose decision as to whether the deficiency should or should not be condoned in any such case shall be final.

(c) Apply for admission to the Registrar, through the Principal of the College in the prescribed form and produce certificates signed by the Principal of the College—

(i) of good conduct,

(ii) of fitness to present himself at the examination,

(iii) of having prosecuted a regular course of study for not less than two academic years at the college, and

(iv) of having completed the course of study at the College and passed the college tests to the satisfaction of the Principal in the following subjects,* viz.,

(1) Pedagogical Drawing.

(2) Physical Training.

or any one of the following:

1. Drawing	5. Art and Needle Work
2. Painting	6. Spinning and Weaving
3. Wood Work	7. Home Science, and
4. Metal Work	8. Music.

Provided that on the recommendation of the Principal the Academic Council may permit a student to complete a course in Advanced English instead of in Modern Indian Languages.

(1) Basic Craft or English or Mathematics or Mother-tongue. (This part of the Ordinance is subject to the final decision of the Executive Council to be made in or about August 1949.)

(2) Pedagogical Drawing.

(3) Physical Training.

(4) Any one of the following, viz. (*a*) Spinning and Weaving, (*b*) Wood Work, (*c*) Elementary Agriculture, (*d*) Drawing and Painting, (*e*) Gardening, (*f*) Bookcraft, (*g*) Art, Needlework and Embroidery, (*h*) Leather work, and (*i*) Clay work.

2. The Examination shall consist of two parts, viz.,

Part I.—Written Examination in the following papers;

Paper I. Education-Psychology and General Methods.

Paper II. School Organisation and School Hygiene.

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* The subjects given here are those of the Saugor University; the subjects prescribed by the Nagpur University are:—

Papers III to VI. Special Methods of Teaching (1) Mother-tongue, (2) English or Basic Crafts, (3) Mathematics and General Science or Social Studies (History, Civics and Geography) or Music or Home Science.

Part II.—Practical Teaching. The Practical teaching of the candidates shall be judged by—

(i) their teaching during the course of training.

(ii) a final test—two lessons to be given in any two of the subjects selected for Paper III.

(This is the regulation of the Saugor University. The regulation of the Nagpur University is slightly different and is given below:—

The examination shall consist of two parts:

Part I.—Written Examination

The following will be the papers in which the written examination will be held for the Dip.T. examination.—

Paper I Principles and Practice of Education,

Paper II Educational Psychology,

Paper III School Organisation and School Hygiene,

Paper IV One of the following languages and its methodology: Marathi, Hindi or Urdu.

Paper V English and its methodology,

Paper VI Special Methods of Teaching in one of the following subjects:—

(i) Mathematics and General Science,
(ii) Social studies,
(iii) Home Science,
(iv) Music,
(v) Physical Education.

Part II.—Practical Teaching

The Practical Teaching of the candidates will be judged by—

(1) their teaching during the course of training,

(2) a final test—Three lessons to be given in each of the three subjects selected for papers IV, V and VI.)

3. Marks and classification shall be as follows:

Part I.

Marks obtainable in each paper .	100
Aggregate marks obtainable	600

Part II.

Marks obtainable during the course as assessed by the Principal of the training college	100
Marks obtainable in the final test	100
Aggregate marks obtainable	200

In the examination in Part I, examinees obtaining not less than 360 marks shall be placed in the first division, those obtaining less than 360 marks but not less than 270 marks shall be placed in the second division and those obtaining not less than 180 marks in the third division.

In the examination in Part II, examinees obtaining not less than 160 marks shall be placed in the first division, those obtaining less than 160 marks but not less than 120 marks in the second division and those obtaining not less than 80 marks in the third division.

In order to obtain the diploma in teaching an examinee must pass in Parts I and II.

A candidate who fails in Part I and/or Part II may present himself again for examination in the part or parts on payment of a fee of Rs. 20 provided that the candidate who presents himself for examination in Part II under this paragraph shall produce a certificate from the Divisional Superintendent of Schools of the Circle in which he is serving that he has been a teacher in a recognised school for not less than four months or is serving in the administrative branch of the Education Department.

In the case of a candidate re-admitted to the examination in Part II no marks shall be awarded for teaching during the courses of training, but the final test shall carry 200 marks.

There shall be an internal and an external examiner for the test and each shall allot marks upto a maximum of 100.

A candidate who under the provisions of the University Ordiannce then in force was admitted to the Dip.T. Examination held in or before 1948 and failed in Part I of the examination may present himself for Part I of the examination held under this ordinance on payment of a fee of Rs. 20.

SYLLABUS—SAUGOR UNIVERSITY

Paper I.—Educational Psychology and General Methods

A. Educational Psychology—Importance of Psychology to the teachers, sensation, perception, instincts and innate tendencies, interest and attention, imagination, memory, reasoning, feelings and emotions, habit formation, rudiments of mental hygiene, general sketch of the stages of child development.

B. General Methods—Aims of education, functions of home and school, nature of teaching process, illustrations and aids, questioning and dealing with answers, lesson planning, correction of written work, home work, syllabuses, examinations, types of lessons, modern educational developments (to be treated very generally), Montessori Method. The Dalton Plan, the Project Method, the Play-way.

Paper II.—School Organisation and School Hygiene·

A. School organisation with special reference to Middle schools. Buildings and grounds. Equipment. Staff and classes. Curricula, Syllabuses and Time-Tables. Home work. Examinations. Registers. Discipline. Hostel management. School activities outside the class-rooms. Corporate feeling in a school. Parental co-operation. Organisation of Physical Education.

B. School Hygiene: Light and ventilation in class-rooms. Correct posture in sitting. Proper distance between seat and desk. Laws of health and sanitation. Precautions to be taken against infectious diseases. Common accidents and first aid.

An elementary outline of the human body and its functions, with special reference to the eye, ear and skin. Elementary Anatomy and Physiology with reference to physical education.

Paper III.—Special Methods

1. Special methods of teaching (1) Mother-tongue, (2) English or Basic Craft and (3) Mathematics and Science or Social Studies (History, Civics and Geography) or Music or Home Science.

2. Candidates must, in consultation with their tutors, write two essays each on any aspect of the course in special subjects chosen by them, embodying the result of their study and experience.

3. Candidates must complete three assignments of a practical nature in each special subject, e.g. preparation of detailed teaching syllabuses, schemes of work, charts, maps, diagrams, teaching devices, aids, etc.

The general scope of the course is as follows:—

(*a*) Aims and values of teaching the subjects.

(*b*) Preparation of syllabus in the subjects.

(*c*) Correlation with other subjects.

(*d*) Notes of lessons.

(*e*) Different kinds of activities in teaching the subject.

(*f*) Application of the subject to everyday life.

(*g*) Appropriate methods of teaching the topics of middle school syllabuses at different stages (reorganised syllabuses).

(*h*) Teaching of different branches of the subject.

(*i*) Special aids and equipment for teaching the subject.

Paper IV. English or Basic Craft

English: Grammar, Composition, Rapid reading, Essay and Precis Writing.

Consolidation and revision of the course prescribed in the subject for Classes V-IX of High Schools (Reorganised Syllabuses) and intensive

study of the non-intensive course the subject prescribed for the High School Certificate examination of the corresponding year with special reference to aims, objectives and methods of teaching the subject at different stages.

Basic Craft (Spinning and Weaving).

A. Theory

1. Cotton and its varieties grown in India and outside, fibres and their characteristics.
2. Ginning devices, functions of different parts of ginning machine, carding bow, its parts and their functions. Sliver making.
3. Takli, its various kinds, its parts and their functions. Other necessary articles for good spinning, Winder Lati and Gundi.
4. Mathematics of spinning—definition of round, count, strength and uniformity, calculating the resultant speed, percentage of strength, average speed, cost of yarn, calculation of wages for spinning and carding.
5. Dhanush Takli, its parts and their functions, its invention, advantages over ordinary takli.
6. Spinning wheel, its varieties, different parts and their functions, requisites for good speed in spinning. Problems connected with spinning.
7. Weaving machine, its parts and their functions. Problems connected with weaving.
8. Knowledge of records to be maintained in the school, graphs, individual records and school records.
9. Management of craft equipment and raw material. Recognition of qualities and defects of equipment and material.

B. Practice

1. Repairs to craft apparatus.
2. Different processes of the craft.
3. Fitting up the apparatus.

Paper V. Mother-Tongue

(Hindi, Marathi and Urdu or Advanced English).

Consolidation and revision of the course prescribed in the subject for Classes V-IX of High Schools (Reorganised Syllabuses) and study of the intensive course in the subject prescribed for the High School Certificate Examination of the corresponding year with special reference to aims, objectives and methods of teaching the subject at different stages.

Paper VI. Any one of the following

[Mathematics and General Science, or Social Studies (History, Civics and Geography), or Music or Home Science].

In each of the subjects, the Syllabus is:—

Consolidation and revision of the course prescribed in the subject for Classes V-IX of High School (Reorganised Syllabus) and the intensive study of the non-intensive course in the subject prescribed for the High School Certificate Examination of the corresponding year, with special reference to aims, objectives and methods of teaching the subject at different stages.

SYLLABUS—NAGPUR UNIVERSITY

Paper I: The Principles and Practice of Education

The aims of education; the agencies of education and their functions; the home, the school, society and the State; types of schools and their functions; ideology of basic education; social education.

Nature of teaching process; illustrations and aids; questioning and dealing with answers; lesson planning; correction of written work; home work; syllabuses, examinations; types of lessons; modern educational developments (to be treated very generally). The Montessori Method; The Dalton Plan; the Project Method; the Play-way; Use of school libraries; Choice of text-books.

Paper II: Educational Psychology

Importance of psychology to teachers, sensation; perception; instincts and innate tendencies; interest and attention; imagination; memory; reasoning; feelings and emotions; habit formation; rudiments of mental hygiene; general sketch of the stages of child development.

Paper III: School Organisation and Hygiene

A. School organisation with special reference to Middle Schools, Buildings and grounds. Equipment. Staff and classes. Curricula. Syllabuses and time-tables. Home-work. Examinations. Registers. Discipline. Hostel management. School activities outside the class-rooms. Corporate feeling in a school. Parental co-operation. Organisation of physical education.

B. School Hygiene: Light and ventilation in class-rooms. Correct posture in sitting. Proper distance between seat and desk. Laws of health and sanitation. Precautions to be taken against infectious diseases. Common accidents and first-aid. An elementary outline of the human body and its functions with special reference to the eye, ear and skin. Elementary anatomy and physiology with reference to physical education.

Papers IV, V and VI: Special Methods of Teaching

Paper IV Marathi, Hindi or Urdu.

V English and its methodology, and

VI One of the following,—

(i) Mathematics and General Science,

(ii) Social Studies,

(iii) Home Science,

(iv) Music, and

(v) Physical Education.

(The regulations here are the same as those of the Saugor University given under Paper III above).

HYDERABAD

In the State of Hyderabad, there are two examinations for the undergraduate teachers—I.T.C. and T.C.

The I.T.C. Examination is conducted by the Education Department of the State. It can be taken by a candidate who has passed the Intermediate Examination after undergoing training for one year at the Osmania Training College, Hyderabad (Deccan). The T.C. Examination is also conducted by the Education Department. It can be taken by a candidate who has passed the Matriculation or an equivalent examination after undergoing training for one year at the Osmania Training College, Hyderabad, or any other teacher-training school—conducted or recognised by the Government of Hyderabad.* The Regulations of these examinations (including syllabuses) are given below:—

INTERMEDIATE TEACHERS' CERTIFICATE (I.T.C.)

1. The Course for the Intermediate Teachers' Certificate shall extend over one academic year, with the necessary attendance of 75 per cent at the Osmania Training College, Hyderabad (Deccan).

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* The following is the list of such institutions:

(1) Training College, Hyderabad.

(2) Normal School for Women, Kachiguda, Hyderabad.

(3) Normal School for Men, Malekpet, Hyderabad.

(4) Normal School for Men, Aurangabad, Hyderabad.

(5) Normal School for Men, Warangal, Hyderabad State.

(6) Normal School for Men, Raichur, Hyderabad State.

(7) Normal School for Men, Mahbubnagar, Hyderabad State.

2. No student shall be admitted to the course unless he has passed the Intermediate Examination of the Osmania University or of some other University approved by His Exalted Highness the Nizam's Department of Education.

3. Candidates shall undergo a course of instruction in the following subjects:—

(1) Educational Psychology and Principles of Education.

(2) School Organisation and Hygiene.

(3) Child Education.

(4) History of Education.

(5) Methods:—

(*a*) Teaching of English (Compulsory).

(*b*) Any two of the following:—Mathematics, Science, History, Geography, Vernaculars and Classical Languages.

(6) Urdu.

(7) English.

(8) Physical Training.

(9) Drawing and Handwork.

(10) Nature Study and Gardening or Manual Training.

4. There will be a Final Examination in subjects (1), (2), (3), (4), (5) and also in Practical Teaching, but only those candidates shall be eligible for the Final Examination who have satisfactorily finished the course in subjects (6), (7), (8), (9) and (10).

5. Each candidate will be required to give 21 lessons under supervision during the year.

6. The allotment of marks shall be as follows:—

Each paper 1 to 4 will be of 3 hours' duration and will carry 100 marks. There will be a separate paper on Methods of English of 2 hours and will carry 75 marks. The other paper on Method—Optional subjects will be of 3 hours' duration and will carry 100 marks. Practical Teaching, 125 marks. Due regard will be paid to the College record in practical lessons.

7. Candidates who obtain not less than 30 per cent of the marks in papers 1, 2, 3, 4 and 5 and 33 per cent in the aggregate of the Theoretical Examination and 35 per cent in the Practical Examination shall be declared to be eligible to receive the Intermediate Teachers' Certificate.

Names of successful candidates shall be arranged in three classes as under:—

Theoretical Examination	Practical Examination	
60 per cent	65 per cent	1st Class
45	50	2nd
33	35	3rd

If a candidate secures 65 per cent of the marks in any Examination subject, he shall be declared to have passed with distinction in that subject.

8. If a candidate fails in not more than two subjects but secures not less than 25 per cent marks in them, his College Record will be taken into consideration. Such candidates will be placed in the third Division, whatever their marks may be in the other subjects of the Examination.

9. Candidates who fail in the theoretical part of the examination only, shall be allowed to present themselves for re-examination in that part on payment of the ordinary fee.

10. Candidates who fail in the Practical part only shall be allowed to present themselves for re-examination in that part only provided—

(a) they undertake one term's teaching at the Osmania Training College,

(b) they have secured in the theoretical examination at least 5 percent more than the minimum pass marks in the aggregate.

11. Candidates who fail in the examination shall not be required to attend at the Osmania Training College except under (10).

12. The following is the scale of fees:—

Tuition Fee including Examination fee		Rs. 75
	Theoretical part only	Rs. 15
	Practical part only	Rs. 5
	Theoretical and Practical	Rs. 20

SYLLABUS

Paper II

School Organisation and Hygiene

(a) Meaning and advantages of organisation: System and organisation in the group represent instinct and habit in the individual. Mechanising routine and organisation.

(b) Relation of subject-matter to fatigue. The law of diminishing returns in Education. Preserving hygienic conditions in class room, e.g. hygiene and eyesight, writing postures, etc. "Fatigue coefficients" of curricular subjects.

(c) The problem of attention: positive and negative incentives and instincts. Spencer's doctrine of natural consequences.

(d) Classification of pupils, the time-table, class emulation, home-work, library and examinations.

(*e*) Relation of school and home : reports, parental co-operation and home lessons.

(*f*) Aims and methods of discipline, training in responsibility and the right use of freedom.

(*g*) Head-master and staff: Functions and duties.

(*h*) Value and organisation of public functions; prize distribution, inter-school matches, etc.

Hygiene of School Life

(*a*) Hygienic conditions of school life: Ventilation, lighting, furniture, etc., Hygienic conditions of home life: diet, sleep, environment, etc.

(*b*) Detection of defects and diseases.

(*c*) Medical inspection: reports, consultations, remedies, etc.

(*d*) The school building: size and number of rooms, common room, furniture, etc.

PAPER I

Principles of Education

(*a*) Aims of education and the function of the school.

(*b*) The principles governing the framing of a curriculum, variation in emphasis on different groups during school-going age.

(*c*) The stages of the school course. The Junior, Middle and High stages.

(*d*) General methods of teaching appropriate to each subject: Uses of illustrations and the psychological significance. The inductive and deductive, heuristic and Socratic methods.

(*e*) Exposition and questioning.

(*f*) Correlation of studies, planning of courses of lessons and of individual lessons and sections of lessons.

(*g*) Correlation and concentration. Their limitations and applicability. Method units and the Herbartian steps.

(*h*) Correction of exercises.

(*i*) Tests and records of progress: Examination and promotion.

(*j*) A few maxims of method.

Educational Psychology

(*a*) The study of children's development from the point of view of physique, intelligence and character based as far as possible on observation of individuals and classes.

Stimulus and response and the nervous system, cognition, feeling and will.

(*b*) A study of the means by which children acquire knowledge and skill including such as the following: The senses and sense training, perception, imagination, ideation and memory.

(*c*) Instincts and their relation to children. Forms of activity and of expression, function of play, imitation and suggestion.

(*d*) Attention, instincts and habits.

(*e*) Simple processes of reasoning and the growth of will.

(*f*) Instincts important to the teacher. Training and Sublimation.

(*g*) Nature and Nurture. How does nurture modify nature?

(*h*) Fatigue.

(*i*) A few modern developments: Psycho-analysis, new and old examinations, Intelligence measures, etc.

Paper IV

History of Education

A brief survey of the history of education from the time of the Jews to the present day with a short account of the educational ideas of the chief contributors.

Jewish Education.

Greek Education.

Roman Education.

Education in the Middle Ages: Monastic Education; Scholasticism and Universities.

Humanistic Education (The Renaissance).

Religious Formalism in Education (The Reformation). Realistic Edution.

Formal Discipline in Education.

Natural Tendency in Education.

The Psychological Tendency.

Scientific Tendency in Education.

Sociological Tendency in Education; Philanthropy and State Control.

Present Tendencies; Dewey or Montessori.

Paper V

Methods of Teaching

A. General. Technique in teaching, Procedures, Devices, Interest, How to Study, Equipment.

B. In teaching the special subjects the following points will be dealt with:—

Aim and value of the subject.

Content and its organisation.

Various methods of teaching the subject.

Correlation with other subjects.

Schemes and notes of lessons.

(Detailed syllabuses for methods of teaching English, History, Geography, Mathematics and Elementary Science are omitted here).

PAPER III

Child Education and Infant School Methods

1. Nature, Scope and problems of child study. Difference between the child and the adult.

   Observation and study of children. Special children and the methods of dealing with them.

   Intelligence tests.

3. The Stages of child development:

   (*a*) Childhood.

   (*b*) Adolescence, Interests in different periods.

4. Instincts and interests.

5. Problems of child education.

   The Kindergarten and the Montessori systems.

6. Play and games.

7. School Work and fatigue—physical and mental.

8. (*a*) Language, oral lessons, stories and dramas.

   (*b*) Music and poetry.

   (*c*) Pictures.

   (*d*) Numbers.

   (*e*) Handwork and drawing.

   (*f*) Reading and writing.

Non-Examination Subjects (Nos. 6 to 10)

The syllabuses of the non-examination subjects are omitted here.

TEACHERS' CERTIFICATE EXAMINATION (T.C.)

1. The course for the Teachers' Certificate Examination shall extend over one academic year with the necessary attendance of 75 per cent at the Osmania Training College, Hyderabad (Deccan), or one of the Teachers' Training Schools—Government or recognised by the Government of Hyderabad.

In special cases and for sufficient cause shown, the Director of Public Instruction may, on the recommendation of the Head of the Training institution, condone deficiency in attendance not exceeding 10 per cent. In case of ill-health the application shall be accompanied by a certificate from a registered medical officer.

2. No student shall be admitted to the course unless he has passed the Higher Secondary Certificate Examination conducted by the Board of Secondary Education, Hyderabad, or some other equivalent examination approved by the Government of Hyderabad.

3. Candidates shall undergo a course of instruction in the following subjects :—

(1) Principles of Education and Educational Psychology.

(2) School Organisation and Hygiene.

(3) History of Education.

(4) Methods of teaching one of the following languages :

(*a*) English, (*b*) Hindustani, (*c*) Telugu, (*d*) Marathi and (*e*) Kannada.

(5) Methods of teaching the following subjects :

(*a*) Mathematics, (*b*) General Science, (*c*) History, and (*d*) Geography.

Note : General Science Paper shall contain alternate questions in Domestic Science for the sake of women pupil-teachers.

(6) One of the following special subjects :

(*a*) Child Psychology and Education.

(*b*) Adult Education.

(*c*) Drawing and Handwork.

(*d*) Domestic Science in the case of lady pupil-teachers.

(7) *Non-examination subjects* :

(i) Drawing and Blackboard illustration.

(ii) Handwork.

(iii) Physical Training.

(iv) Gardening.

4. The examination shall comprise seven papers and a Practical Examination as follows :—

THEORY

(1) Principles of Education and Educational Psychology (3 hours—100 Marks).

(2) School Organisation and Hygiene (3 hours—100 Marks).

(3) History of Education (3 hours—100 Marks).

(4) Teaching of English, Hindustani, Telugu, Marathi, and Kannada (2 hours—50 Marks).

(5) Teaching of Mathematics and General Science (3 hours—100 Marks).

(6) Teaching of History and Geography (3 hours—100 Marks).

(7) Special Subject (2 hours—50 Marks).

Practical

(a) Record of teaching work (75 Marks).

(b) Teaching of one lesson at the Public Examination (75 Marks).

5. Each candidate will be required to give at least 30 lessons not less than 6 in each of the subjects: Language, Mathematics, General Science, History and Geography under supervision during the year. The record of teaching work of each candidate, which has to be maintained by the Heads of Training Institutions, carries 75 marks. These marks will be taken into consideration at the time of the Practical Examination.

6. Candidates who obtain not less than 30 per cent in each of the papers and 33 per cent in the aggregate of the Theoretical Examination and 35 per cent in the Practical Examination shall be declared to have passed the Examination. Only those candidates shall be eligible to appear for the final examination who have satisfactorily finished the course in the non-examination subjects.

7. The Classes or Divisions will be as follows:—

Theory

1st Division—60% and above.	Of the aggregate marks in Theory.
2nd Division—Below 60% but not less than 45%.	
3rd Division—Below 45% but not less than 33%.	

Practical

1st Division—65% and above.	Of the aggregate marks in Practical.
2nd Division—Below 65% but not less than 50%.	
3rd Division—Below 50% but not less than 35%.	

If a candidate secures 65% of the marks in any subject he shall be declared to have passed with distinction in that subject.

8. The Heads of Training Institutions have to send the class record of the pupil teachers in April every year to the Office of the Secretary to the Commissioner for Government Examinations, so that it may be considered in the case of those candidates securing 25% and above in one or two subjects but failing in the examination. Those who get less than 25% in not more than two subjects will be permitted to appear in that subject or those subjects at a subsequent public examination to qualify them for a pass. Such candidates will be placed in the third division, whatever their marks may be in the other subjects of the examination.

9. Candidates who fail in the Theoretical part of the examination only shall be allowed to present themselves for re-examination in that part on payment of the ordinary fee.

10. Candidates who fail in Practical part only shall be allowed to present themselves in that part only provided,

(*a*) they undertake one term's teaching at the Training Institution where they underwent training;

(*b*) they have secured in the Theoretical Examination at least 5% more than the minimum pass marks in the aggregate.

11. The following is the scale of fees:

Tuition fee including Examination fee—Rs. 50.
(For private candidates only.)

Examination fee:

Theoretical part only (whole or group)	Rs. 9
Practical part	Rs. 3
Theoretical and Practical part	Rs. 12

DETAILED SYLLABUS

1. *Principles of Education and Educational Psychology*

PRINCIPLES OF EDUCATION

1. Meaning of Education: Limited and extensive.
2. Aims of Education: Earning of livelihood, preparation for complete living, social aim, moral aim, adjustment to life.
3. Educational Agencies: home, school, profession, government, religion.
4. Nature of Teaching.
5. Principles of Teaching method:
   (*a*) Principle of Activity.
   (*b*) Principle of Relation with Life.
   (*c*) Principle of Interest.
   (*d*) Principle of Definiteness of Aim.
   (*e*) Principle of Selection.
   (*f*) Principle of Division.
   (*g*) Principle of Practice.
6. Kinds of lessons:
   (*a*) Acquirement of Knowledge.
   (*b*) Acquirement of Skill.
   (*c*) Acquirement of Appreciation.
7. Some Maxims of Method:
   (*a*) Proceed from the known to the unknown.
   (*b*) Proceed from the concrete to the abstract.
   (*c*) Proceed from the particular to the general.
   (*d*) Proceed from the easy to difficult.
   (*e*) Proceed from the simple to the complex.

8. Individual work: Its advantages and disadvantages; Dalton Plan.
9. Group work: Its advantages and disadvantages; Project Method.
10. Curriculum making:
    (*a*) Principle of conservation.
    (*b*) Principle of creativeness.
    (*c*) Principle of preparation for life.
    (*d*) Principle of activity.
11. Logical and Psychological order of studies: Detailed study.
12. Correlation of school subjects: Detailed study.

Educational Psychology

1. Importance of Psychology for the teacher.
2. Consciousness: States of Consciousness—Cognition, Affection, Conation.
3. Sensation: Nature-Senses (Visual, Auditory, Tactile, Gustatory, Olfactory, Kinaesthetic)—Characteristics.
4. Perception: Its meaning; its conditions; illusion; hallucination; psychology of reading; percepts; perception of space; time, self, direction. Difference between the perception of a child and an adult.
5. Apperception: The principle of apperception; its use in lessons; tests of perception.
6. Observation: Using different senses, use of concrete objects; Montessori Method.
7. Imagination: Its nature; mental images; imagery; process of imagination. Kinds of imagination; training of imagination; tests of imagination.
8. Thinking: Kinds; training of thinking; concept; judgment; reasoning; deductive and inductive reasoning.
9. Attention and Interest: Importance of attention; physiological adjustments; causes of inattention; conditions of attention; kinds (involuntary and voluntary); centre and margin of attention; characteristics of children's attention; training of attention; attention and interest; kinds of interest.
10. Memory: Association and the laws of association; process of memory; factors: registration; retention; recall; recognition. Methods of memorizing: whole instead of part; spaced repetition. Characteristics of children's memory.
11. Heredity and Environment: Individual Differences.
12. Instincts Nature; characteristics; methods of training; curiosity; imitation; suggestion and suggestibility; regarious instinct;

hoarding; constructive instinct; pugnacity; play and its educational value.

13. Emotions: Mood; Disposition; Temperament; Sentiment; Characteristics of Emotions; Training of Emotions: its Resources: (Curricular Subjects; School Organisation; Extra-Curricular Activities).

14. Fatigue: Its Nature; Kinds: Remedies: Complete Rest, Change.

15. Intelligence: Its Nature; Mental Age; Intelligence Quotient; Classification on the basis of Intelligence. A few samples of tests: Binet-Simon and Terman.

16. Learning: Definition, Essentials of Learning. Trial and Error Method of Learning. Laws of Learning.

17. Habit: Its nature; advantages; principles of habit formation.

2. *School Organisation and Hygiene*

School Organisation

1. Introduction: Organisation: Its meaning, purpose and importance.

2. The Social Life of the School: The influence of the social life of the school; The management of the social life in school; The Monitorial System; Democratisation of school government; various forms of pupil participation in school government and management.

3. Discipline: (*a*) Diverse conceptions of school discipline. The modern conception of school discipline.

   (*b*) Punishment: Its purpose and its various forms.

   (*c*) Rewards: The psychology of rewards, form of rewards.

4. The Relation of the School and Home: Parental co-operation, Home Work.

5. Healthful School Conditions: The site of the school. The school building. The class-room. Lighting and ventilation. Water-supply, play-grounds, school garden, library, furniture: desks, black-board and other equipment, and hygienic habits of posture.

6. Some Types of Schools: Nursery Schools, Kindergarten, Montessori, Schools for Defective Children, Secondary Schools, Vocational Schools, Continuation Schools, Schools for the Handicapped and Backward Children and Reformatory Schools.

7. Salient Features of our Education System.

8. Classification and Promotion of pupils: Group and individual teaching. The class as a unit of teaching. Size of classes. Bases of the classification of pupils. Bases for the promotion of pupils.

9. Examinations: Their meaning and purpose, written and oral tests. Old and New examinations.
10. Time-Table for Elementary and Middle Schools.
11. The Head Master: Duties and responsibilities, relation with the staff, the pupils and the parents.
12. The Teacher: His duties and responsibilities, relation with the pupils and the Headmaster.
13. Extra-Curricular Activities: Their function and organisation. Kinds of Extra-Curricular Activities.
14. Co-education.
15. Religious and Moral Education.
16. Physical Education.

SCHOOL HYGIENE

1. Importance of Hygiene in Schools: diet, clothing and cleanliness.
2. Broad Outlines of Anatomy and Physiology.
3. Hygiene of the Skin.
4. Care of the Eye and Ear.
5. Infectious Diseases and Preventive Measures.
6. Common Ailments of Children and their Detection.
7. First Aid and Physical Education.
8. Medical Inspection and School Medical Service.

3. *History of Education*

1. A brief survey of the History of Education in Europe from the 17th century: especially the teaching and achievements of Comenius, Locke, Rousseau, Pestalozzi, Herbart, Froebel, Spencer, Montessori, and Dewey.
2. Education in India since 1835: Macaulay's memorandum; Effects of English as the medium of instruction. Non-partisanship of government in religious education. Adam's educational reports. Use of native languages in government offices. Proposal for the establishment of a University. Wood's Report. The value of native languages in education. Hunter Commission. Memorandum on Technical Education on (1886). Government's Educational Policy (1904 to 1913). Calcutta University Commission (1917). Hartog Committee. Abbot & Wood's Report (1937). The problem of Adult Education.
3. Education in the Nizam's Dominion: Mayhew Report. Reorganisation of education and establishment of the Osmania University. Mackenzie' Scheme ; Abbot Report.

5. *Methods of Teaching*

(Detailed syllabuses are omitted here).

6. (*a*) *Child Psychology and Education*

1. Origin, Nature and Scope of Child Study.
2. Methods of Child Study Observation Tests.
3. Heredity and Environment Factors determining Growth, Social Heredity.
4. Stages of Development (Children from 0 to 12).
5. Individual Differences: Exceptional Children (Backward and Precocious) and how to treat them.
6. Intellectual development, sensation, perception, memory imaging, imagination, reasoning, tests of intelligence.
7. Instincts and their training (curiosity, imitation, play, hoarding, sex, the expressive instinct).
8. Emotions (fear, anger, jealousy, etc.) and how to sublimate them.
9. Habits (neatness, cleanliness, punctuality, etc.).
10. Moral training (truth, courage, justice, etc.). Character formation.
11. Fatigue.
12. Infant schools (Kindergarten and Montessori Schools). Curriculum (Reading, writing, number, music, dance, games, handwork and nature-study) and methods of teaching.
13. Baby's diet, clothes, bath, sleep, etc.
14. Children's diseases (rickets, scabies, sore eyes, small-pox, cough, ear-ache, etc.) and precautions.
15. Medical examination.

6. (*b*) *Adult Education*

1. History of Adult Education in: England, China, Philippines, Denmark, Russia and India, emphasizing:
   (*a*) Political and social factors which created the need for adult education.
   (*b*) Part played by voluntary associations and States;
   (*c*) Purpose of adult education in general; adult education and literacy.

Problems of Adult Education in India.

2. Educational Psychology: Class Methods, difference between teaching adults and teaching children, visual aids, museums, libraries, etc.

3. The Adult Education Worker and his relation to his students; voluntary organisation.
   Purely educational work.
   Personal relations with students. Adult education worker should be a friend and counsellor.
   Boundaries of educational, social and political work impartiality and independence of tutor, his work merely to organise purely educational classes and provide educational activities of a non-partisan nature.
   Cultural poverty and its improvement through adult education.
4. Literacy Methods:
   Methods with special reference to languages and to literature:
5. Aim of Adult Education in Towns:
   Building up civic sense.
   Rights and duties of a town dweller.
   Social service.

or

Aim of adult education in villages:
To build up village community.
Village health and elementary hygiene.

or

For females only:

Elementary Domestic Science and "Craft of Motherhood."

6. (c) *Drawing and Handwork*

Group I. (Drawing); Group II. (Wood Work); Group IIII. (Embroidery) for girls; Group IV. (Clay Modelling); and Group V. (Binding).

(Detailed syllabuses are omitted here)

6. (d) *Domestic Science*

Domestic Science will consist of the following subjects which will be taught both theoretically and practically:—

(1) Physiology and Hygiene.
(2) Housewifery.
(3) Laundry.
(4) Needle-work.
(5) Cooking, and
(6) Gardening.

I. *Physiology and Hygiene*

1. Bony System: Kinds of joints, their structure and functions.
2. Muscular System: Kinds of muscles, their structure and functions.

3. Circulatory System : Composition and functions of Blood. Structure of Heart and course of Circulation.
4. Digestive System : Structure and function of the digestive organs and the course of digestion in the alimentary canal.
5. Respiratory System : Structure and functions of the organs of circulation. Relation between the circulatory and the respiratory system.
6. Nervous System : Structure and function of the organs concerned in the system and its control over the other system.
7. An Outline study of the Ear, Nose, Eyes, Skin, Tongue and Kidneys.

Practical Work

Diagrams of the important systems and organs to be drawn. Organs such as Heart, Lungs, Brain, etc. of a sheep or goat to be shown to the students to make them grasp more clearly.

Hygiene

8. (*a*) Ventilation and lighting of rooms.
   (*b*) Constituent gases in the air and how air is made impure. Its effect on the health of occupants of the room.
   (*c*) Sources of water supply-methods of purifying water.
   (*d*) The causes, symptoms, prevention and cure of the following diseases : Cholera, Malaria, Typhoid, Tuberculosis, Small-Pox, Measels, Plague and Skin diseases, etc.
   (*e*) Care of the sick, the arrangement of sick room and disinfection of an infected room.

Practical Work

Arrangement of a sick room—Reading of Temperature. Disinfection of a room.

II. Housewifery :

1. Site and choice of house.
2. Duties of a house-wife.
3. Marketing—Keeping of accounts and making of budget.
4. Removal of stains from furniture, floor and other articles.
5. Cleaning and polishing of household utensils and ornaments.
6. Household pets and keeping of poultry.
7. Arrangement and equipment of sitting, dining, bed, kitchen and store-room, etc.
8. The art of arranging rooms when there is not enough space and less equipment.

Practical Work

1. A scrap book should be prepared from cuttings and pictures dealing on this subject.
2. School rooms such as kitchen, store-room, etc. should be arranged properly.

III. Laundry :

1. Various methods of washing, starching, drying and finishing of cotton, woollen, silk and Artificial-silk clothes.

Types of stains and methods of removing them.

3. Household methods of dry-cleaning.
4. Methods of cleaning Non-Fast coloured Garments.

Practical Work

All that is taught in theory in this subject should be done in practical also.

IV. Needle Work :

1. Types of plain stitches such as Running, Hemming, Tacking, Back stitching, French seams, etc.
2. To draw and cut out on paper the following and ability to stitch one of them : Frock, Kurta, Shirt, Sailor Suit, Blouse, Knickers, etc.
3. Ability to stitch embroidery designs using suitable coloured threads.

Practical Work

This subject is itself taught in a practical manner.

V. Cooking :

1. Planning of simple, balanced and wholesome diet.
2. Menu Making.
3. Disadvantages of an unbalanced diet—certain deficiency diseases.
4. Preparation of ordinary and special dishes such as : Rice, Dal, Puries, Vegetable Bhujias, Halwas such as Carrot, Potato, Pumpkin, Pickles, Vegetable and meat Samosas, Puran Puries, vegetable and Mutton Biryani, Shami and Sikhi Kababs, Queen Cakes, Coconut Toffee, Fudge, etc., etc.

VI. Gardening :

1. Essential points to be considered while choosing a plot for garden : The site, soil, etc.
2. Advantages of having a garden in school.

3. How work is to be distributed to all the students so that all may be busy during gardening work.
4. Some common and useful vegetables, flowers and fruit seeds. How and when they are sown?
5. Protection of plants from insects and other enemies.
6. How seeds can be preserved for the next season.
7. Advantages of having a garden in the home.

7. Under this head, there are syllabuses for (1) Drawing and Blackboard Illustration, Handwork, Physical training and Gardening. These have been omitted here.

MADRAS

In Madras, the undergraduate teachers are trained exclusively by the Department. Any person who has passed the S.S.L.C. examination may be admitted to the course whose duration is of two years. Training institutions are conducted by the Department as well as by public bodies. The rules regarding the course are given below:—

1. The T.S.L.C. Examination will be open to all candidates who have undergone the prescribed course of training under the rules. Untrained candidates will not be admitted to the examination.

2. Pupils appearing for the Public Examination for the first time at the end of the two years' course must take their examination in all the subjects included under Group A of the course and prescribed for the examination. The subjects included under Group A cannot be taken piecemeal at first appearance. Pupils who have already appeared for the public examination once and failed in the examination may, however, appear for the subsequent examination without further training.

3. Heads of institutions are requested to take particular care to see that each student is eligible to appear for the T.S.L.C. Examination. No candidate shall be considered eligible unless he or she has put in the required attendance, i.e. 75 per cent in each year of training and a candidate should be considered eligible for promotion from the junior to the senior class, only if the shortage in attendance, if any, during the first year is condoned by the District Educational Officer or the Inspectress or the Principal of the Government College concerned.

4. *The subjects for study and the duration of the course*: The course of training is predominantly a professional one and covers a period of two years. The subjects for study of the training course are as stated below:—

Group A

I. Theory and Practice of Education:

(a) Principles of Education.

(b) School Administration.

II. Methods of teaching:

(a) A language of the Presidency.

(b) Mathematics.

(c) General science including Nature Study and Gardening, and Home Science for girls.

(d) History and Civics.

(e) Geography.

(f) English, with reference to—

(i) the content of the several subjects up to standard VIII and Form III as given in the syllabuses issued; and

(ii) the special principles appropriate to each subject.

Group B

The subjects are Music, Handicrafts, including Drawing, and Physical Training.

The subjects mentioned in Group A are those prescribed for the public examinations to be held at the end of the two years' training course. The examination scheme will be as shown below:—

Subject.		Duration Hours.
1.	Education I	2
2.	Education II	2
3.	English—Methods and Texts ..	2½
4.	Special Methods (non-language subjects I. Mathematics and General Science	3
5.	Special methods (non-language subjects) II. History and Civics and Geography ..	3
6.	A Language of the Presidency (Methods and Tests)	2½

Note.—(1) The medium of instruction and examination will be the language of the area except where the Director has, for special reasons, permitted the use of English.

(2) While inspecting the Training Schools the inspecting officers should specially see that the B Group subjects, Music Handicraft and Physical Training included in the scheme are not neglected and that the practical work provided for in the syllabuses is satisfactorily worked out. Detailed remarks about these items should specially be made in the inspection reports and if there is any negligence of these subjects it should be brought to the notice of the Director of Public Instruction, Madras.

(3) Pupil-teachers who do not show satisfactory progress in the B Group subjects should not be promoted from the junior to the senior class and if the progress is unsatisfactory in the senior class they should not be presented for the Public Examination.

5. *The Practical Phase of the Course*: The course not only includes instruction in the theory of education and in the principles and methods of teaching the various subjects but also seeks to provide ample scope for teaching practice for each pupil-teacher based on a sufficient number of demonstration lessons given by the members of the training school staff.

Under this scheme, teaching practice is to begin even in the first year, and the school should afford adequate facilities for giving a sufficient number of teaching practice lessons for every pupil-teacher. The inspecting officers will prescribe the number of such lessons for the pupil-teachers with reference to the facilities available in each school and in the light of the details of the plan furnished in this chapter. The officers would check the records relating to teaching practice lessons at the time of inspection.

From the distribution of time for the several subjects and a specimen time-table for each year it will be seen that four periods per week of teaching practice have been provided in the junior class and six periods per week in the senior class. Every two such periods will be followed by a discussion period. So altogether, under teaching practice six periods have been allotted in the time-table for the junior class and nine periods for the senior class. In the first and second years, 16 weeks and 8 weeks respectively may be allotted to demonstration and observation lessons, and the remaining 16 weeks and 20 weeks to teaching practice lessons. Thus in the two years about $16 \times 4 + 8 \times$ or 112 demonstration and observation lessons can be easily arranged for.

This leaves $16 \times 4 + 20 \times 6$ or 184 periods for teaching practice for the two years' course. In each period it will be possible for as many pupil-teachers to get practice as there are standards and sections in the practising school. The work should be so planned that every pupil-teacher gets not less than 20 periods of teaching practice in each year of the course. This does not exclude the possibility of increasing the number of periods of teaching practice over the minimum laid down above with the co-operation of the neighbouring schools in addition to the practising school. The lessons should be fairly well distributed among all the subjects and all the classes of the practising schools.

A scheme of practice lessons may be prepared in every training school to provide facilities for the observation of continuous lessons in the same class in a particular subject by choosing certain distinctly recognizable units of the syllabus and completing them within one phase of the whole course. The whole group of 15 to 16 students should participate in the preparation of notes of lessons, in the collection of data and in the

preparation of teaching aids under the guidance of the presiding members of the training school staff, aided when necessary by the class teachers of the practising section.

6. *Demonstration Lessons*: There should be a regular course of demonstration lessons in the beginning of the junior class. In addition to these, occasional lessons will be necessary in connection with the new series of practice lessons or for the illustration of a new principle or method. In the two years about ($16 \times 4 + 8 \times 6$) or 112 demonstration and observation lessons can be arranged for. And these 112 lessons may be approximately distributed as follows:—

English, Language, General Science and Mathematics—18 lessons each.

History and Geography—12 lessons each giving a total of 96 lessons.

This will leave a margin of 16 lessons for the subjects which may require them from time to time.

7. *Visits of observation to other schools*: These are not included in the above scheme but where circumstances allow of their being undertaken, they should be arranged for. To make them of real use, students must be required to write after each visit a report which must be scrutinised by the headmaster. Such reports may be conveniently arranged under the following headings:—

(1) The building and its accessories, e.g. playground and latrine, site, plan, accommodation, number and size of class-rooms, ventilation and lighting.

(2) Furniture and apparatus including library and museum and play apparatus.

(3) Curriculum and time-table.

(4) Organisation—

Staff and distribution of work.

Average attendance.

(5) Discipline—How far the children are obedient and attentive.

(6) Teaching—Notes on any lessons attended with reference to the methods employed and the aim and results of the lesson.

(7) Extra-curricular activities and any other distinctive feature of the school.

8. The results of school work done for each school year should be entered against each of the subjects in the column provided for the purpose. In the case of the subjects included under Group A and in the case of Music under Group B, the entry should be in the form of the number of marks gained out of a maximum of 100 for each subject. Great prominence should be given to the regular class work and for this purpose it is necessary to have school marks based not only upon formal written examination but on oral work, exercises, and other practical work. With this end in view, the heads of schools should see that

mark-books are kept by teachers of several subjects in which the results of all the tests held during the year should be entered and that the marks to be entered in the T.S.L.C. should be arrived at by adding up the marks in the individual registers and expressing them in the form of a percentage of the total.

SYLLABUS

I. Theory and Practice of Education

PART I—PRINCIPLES OF EDUCATION

1. The physical basis of mental life—the nervous system—stimulus and response—reflexes. Sense organs—training of the senses. The brain and its functions. Fatigue—the value of rest and recreation.

2. Innate tendencies—instincts. Study of some of the important instincts—parental and group instincts—pugnacity—self-assertion—submission and curiosity—collective and constructive instincts. Imitation and suggestion. Play and its value. Heredity and environment—the part played by each in mental development.

3. Development of behaviour—influence of innate tendencies and environment. Purpose and purposive behaviour. Methods of training behaviour. Social behaviour.

4. Emotions—their influence on behaviour and learning—outward expressions of emotions. Behaviour problems and how to deal with them.

5. Perception—interpretation of sensation—error and illusion. Observation and thinking. Reasoning and imagination—their place in education.

6. Conditions favourable to learning—purposeful activity—interest and attention. Memory—factors involved—forgetfulness. Efficient learning—types of learning—direct and indirect. Learning by doing—the play-way and the project method. Laws of learning—economy in learning—habit formation.

7. Stages of physical and mental development—infancy, childhood and early adolescence—characteristics of each stage. Work and play appropriate to each.

8. General intelligence—its measurement. The use and significance of Intelligence Tests. Individual differences. The backward child—causes of backwardness and how to remedy them.

9. Development of character and personality. Sentiments and ideals—their place in character development.

Practical work

1. Observation of a group of children in the lower school, keeping a record of—

(1) their environment—home, friends, community and other influences;

(2) their physical condition;

(3) their behaviour—attitude towards class-mates, teachers and attitude to work and play; and

(4) their capacity to learn and educational progress in class.

2. Observation of the children in class I, to note how they react to their environment, recording what each child learns during the time he is under observation.

3. Selection of a group of children who apparently have only a low degree of intelligence. Observation and record of their special interests and special abilities, if any.

4. Observation of individual differences of the pupils of any one class, classifying them and recording what causes these differences.

5. Selection of the inattentive children in a class making a note of their interests and the things to which they attend.

PART II—SCHOOL ADMINISTRATION

1. The purpose and place of the school in education—its relation to the home and to the village or town. The aim of elementary and secondary schools.

2. School site—sanitation—building, ventilation and lighting, adequacy of accommodation and "accessibility" of the school. Furniture and equipment for elementary and middle schools. School museum. School garden. Library for teachers and pupils. Playgrounds.

3. Principles of curricula for elementary and middle schools—provision for practical work, for practical application of theoretical knowledge and for a study of local conditions. Preparation and planning of lessons and courses of study. The place of text-books. Time-tables for elementary and middle school classes—provision for bi-lingual classes and plural-class teaching. The place of excursions and school camps in the curriculum. Home work and its place in elementary and middle schools.

4. Examinations—their meaning and purpose. Written and oral tests. Types of questions. Analysis of errors, and remedial treatment. The use and value of educational tests. Promotions—classification of pupils. Records of pupils' progress.

5. Discipline—its nature—rewards and punishments. Methods of discipline. Regulations relating to dress and behaviour. Personal hygiene. Punctuality—orderliness. The daily assembly and its purpose. Team-spirit—boys' clubs—house system—pupil—leadership and prefects. Student Government—pupils' courts. Hobbies. Boarding and residential schools. The place of extra-curricular activities—scouting and youth movements.

6. Duties of the head teacher—relation with the management and the teachers. The teacher's self-improvement—use of teachers' library. Staff associations and guilds—participation in pupils' activities—study of individual pupils. Planning for the improvement of school resources.

7. Departmental rules and regulations. Educational and school statistics—their correct preparation, interpretation and use. The principal school records and registers—their maintenance. Stagnation and wastage—remedial measures.

8. Inter-school co-operation—Teachers' Associations—study groups—inter-school sports—healthy competitions among pupils of varied school activities such as music, elocution, etc.

9. Parental co-operation, school exhibitions, the use of parents' associations, school day, old pupils' associations and community service.

10. The school as a community centre—reading room—adult education—the use of the magic lantern, cinematograph and radio-receiver. School entertainments—methods and details of organisation. Co-operation with officers of the agriculture, health, co-operative, veterinary and other departments and securing their help for the dissemination of useful knowledge. Bias to local crafts and industries in school work.

11. Modern tendencies in education—individual method and purposive activities like the Dalton Plan and Project Method. Infant schools, mixed schools, technical and vocational schools.

Practical work

1. Daily duties for a definite period during the course—
   (1) to attend to the sanitation of the school building and compound,
   (2) to supervise games and other extra-curricular activities,
   (3) to maintain school records and registers, and
   (4) to conduct the school assembly.
2. Making of charts and other teaching appliances.
3. Preparation of school statistics.
4. Preparation of time-tables and teaching notes.
5. Organising school entertainments and excursions.
6. Attending a course for Junior Red Cross Counsellors and observing a Junior Red Cross Group at work.
7. Attending a course for Scouters or Guiders and observing a group or company at work.

II Methods of Teaching

(Detailed syllabuses in Indian Language, Elementary Mathematics, General Science including Nature Study and Gardening and Home Science for girls, History and Civics, Geography, and English are omitted here.)

The detailed syllabuses in the non-examination subjects have also been omitted here. These include courses in music, 17 handicrafts and 25 pre-vocational subjects. The general course in the two latter groups of subjects is as follows:—

1. The aims and value of teaching handicrafts and pre-vocational subjects in schools.

2. *The teacher's preparation*

(1) The teacher's practical training in the selected crafts.

(2) Practice in exposition by means of drawing and black-board work.

(3) Preparation of a scheme for standards I to VIII for the secondary, and standards I to V for the elementary grades, taking into account the materials available in the locality.

3. *Teaching technique*

(1) Adoption of a concentric plan of work.

(2) Correlated schemes of work, centering round a project connected with food, clothing or shelter.

(3) Formation of hobby clubs.

(4) School museums and similar projects.

4. *General requirements*

(1) Materials and media. Clay, sand, chalk, soapstone, leaf, fibre, rush, cane, bamboo, seed, nut, shell, bead, bone, horn, gut, leather, coral shell, scale, sea fern, paper, cardboard, plywood, soft wood, string yarn, metal wire, metal plate, lead or pewter, strip metal, etc. are suggested for use as the media for the various school handicrafts. The scheme of work should introduce a variety of media in order that both the artistic and practical sides of children may be properly developed.

(2) Tools. The same tools and materials will do for two or more crafts, e.g. the knives, papers, boards, etc. used in cardboard work will do for stencilling, book-binding, etc.

(3) Provision of equipment for individual creative activities. The child should be allowed to follow his own impulses and feelings instead of the teacher's conceptions and ideas being imposed on him. A little judicious help at the right moment will interest and start him on a new idea. In certain subjects like clay-modelling and painting (with finger, chalk and brush) he may be left free to express his ideas directly and unconsciously.

(4) Sketching and drawing. Drawing should not be taught merely as a subject by itself, but should be practised in correlation with the handicrafts and other subjects of the school curriculum, e.g. the use of the several scripts and styles of letters

in connection with language and for purposes of classification, the use of outlines and patterns in relation to number and space work, proportion in relation to drawing to scale, etc.

As children are fond of bright colours, pupil-teachers should have practice in the representation of oval and spherical forms with bright primary and secondary colours. Coloured chalk work in spherical, oval, elliptical, square, oblong and triangular forms in natural colours should be the beginning and should be followed by white chalk work.

(5) The use of books for reference in handicrafts. The use of other literature such as manufacturer's instruction booklets, newspaper and magazine articles on constructive work.

List of Handicrafts

(1) Work in clay (including modelling, moulding and pattering).
(2) Paper work (including papier-mache work and cut-outs for story illustrations, etc.
(3) Cardboard work and simple binding.
(4) Fibre and grass work.
(5) Mat-weaving.
(6) Basketry and string work.
(7) Work with plywood including model-making, toys and fret-work.
(8) Stencilling and stencil cutting.
(9) Lino cuts, and stick and block printing.
(10) Leather work.
(11) Bead work and garland making.
(12) Weaving.
(13) Needlework.
(14) Round cane work.
(15) Toy making.
(16) Whitting in soft wood.
(17) Spinning.

List of Pre-Vocational Subjects

(1) Agriculture.
(2) Practical gardening.
(3) Blacksmithy.
(4) Tailoring.
(5) Cotton-spinning and weaving.
(6) Sericulture.
(7) Village carpentry.
(8) Leather work.
(9) Poultry keeping.
(10) Bee keeping.
(11) Lacquer work, including lac turnery.

(12) Book binding.
(13) Picture framing and passe part out work.
(14) Net making and rope making.
(15) Stencilling—stick printing and cloth printing.
(16) Embroidery and lace making.
(17) Preserving and pickling.
(18) Carving (in cocoanut shell, wood, etc.).
(19) Engraving wood and lino cuts.
(20) Composing and printing.
(21) Turnery.
(22) Metal work of various kinds and tin smithy.
(23) Cap and hat making.
(24) Soap-making.
(25) Paper making.

ORISSA

There are two institutions that train undergraduate teachers in Orissa :—

(1) Secondary Training School, Cuttack.

(2) Secondary Training School, Berhampore.

The examination at the end of the training course is held by the Department. The rules and syllabus of the course are given below :—

1. *Admissions*: Admission will ordinarily be confined to men with intermediate qualifications and matriculates. If in any division the number of such candidates exceeds the number of vacancies, preference should ordinarily be given to men with intermediate qualifications and then to those who obtain the highest percentage of marks at the matriculation examination, but care should be taken that due attention is paid to the claims of candidates from different communities especially from those which are educationally backward. The headmaster of each training school should cause a notice to be circulated annually to each centre of the matriculation examination in his division so that the school may be brought to the notice of candidates for that examination. Holders of the teachers' certificate are recognised by the department as qualified for any posts except headmasterships of middle English schools, for which trained teachers with intermediate qualifications are eligible, and draw a special scale of pay in the Vernacular Teachers' Service.

2. The duration of the course is two years.

3. The examination consists of two parts: theoretical and practical. The theoretical examination will have the following papers:

(1) First Vernacular—Paper I (one paper; 100 marks).

(2) First Vernacular—Paper II (one paper; 100 marks).

(3) Higher Oriya or (4) Sanskrit (one paper; 100 marks).

(5) Principles and Methods of Teaching (one paper; 100 marks).

(6) School Administration and Hygiene (one paper; 100 marks).

(7) General Science and Nature Study (one paper; 100 marks).

(8) Drawing (one paper; 100 marks).

Refresher Course

(9) English (Compulsory Refresher subject (one paper; 100 marks).

and any one of the subjects named below:—

(10) Mathematics (one paper; 100 marks).

(11) History (one paper; 100 marks).

(12) Geography (one paper; 100 marks).

The minimum pass marks are 36 in each paper, except in history and geography (40 p.c.) and drawing (25 p.c.). Aboriginal candidates are required to obtain only 30 p.c. marks in the first vernacular.

The maximum marks assigned for the practical examination are 500 of which 100 are for correct pronunciation and clear enunciation, 75 for black-board work, 75 for hand-made teaching devices and 250 for general teaching skill. In awarding marks for hand-made teaching devices, the examiner will take into account the devices used throughout the school course as well as the devices uses during lesson at the final examination. The private candidates must bring with them exhibits made in accordance with hand-work syllabus for Secondary Training Schools (certified by some responsible person to be their own work). The exhibits brought by them and the devices used during lessons at the practical examinations should be taken into account in awarding marks. In order to pass the practical examinations a candidate must obtain 40 per cent of the maximum marks as signed. Candidates obtaining not less than 900 marks are placed in the first division, candidates obtaining not less than 675 marks are placed in the second division, and other successful candidates in the third division. A candidate who obtains 70 per cent of the marks in any of the eight theoretical groups or in the practical examination as a whole is declared to have passed with distinction in that group or that part of the examination as the case may be.

4. The detailed syllabus is given below.

First Vernacular: Two papers of the standard of those set for the vernacular as a principal subject at the Intermediate Examination, the prescribed books to be selected by the School Examination Board. Three books in simple modern prose should also be prescribed for general reading. From them the passages to be set in Paper II will be selected.

Note: The distribution of marks will be as follows :—

Paper I:

Prose	40
Poetry ..	40
Rhetoric, Prosody applied grammar including	20
Total	100

Paper II:

Rapid Reading	40
Essay	25
General composition ..	20
Rendering of Sanskritised passages into colloquial and elegent Oriya	15
Total	100

Higher Oriya

I. Text Books :

1. Mathuramangala by Bhakta Charan Das.
2. Raghuarakshita (Oriya Drama) By R. C. Mahapatra.
3. Prachina Gadya Padyadarsha (omitting pages 42-72) by Prachi publication.

II. Grammar :

Vyakarana Prabesha by R. N. Roy.

III. Alankar :

General knowledge of the following topics :

(*a*) Kavya Swarupa, (*b*) Rasa, (*c*) Dosha, and (*d*) Special acquaintance with the following alankars :—

(i) Anuprasa, Yamaka and Slesha.

(ii) Upama, Utprekshya, Rupaka, Byatireka, Arthantaranyasa, Swabhabokti, Birodhabhasa, Atisayokti, Apanhuti and Pratibastupama.

IV. Chhanda :

Chakrakeli, Ramakeri, Kalahansakedar, Gujjari, Bangalashree, Asadhasukla, Rasakulya, Kamodi, Chokhi, Sankarabharana, Bibhasakendar and Amitrakshyara.

V. History of Oriya Literature :

General study of the Oriya literature from the ancient times up to date with special reference to the following authors :—

(*a*) Ancient—Sarala Das, Jagannath Das, Balaram Das, Achyutananda Das, and Yasobanta Das.

(b) Medieval—Bhaktacharan, Dinakrushna, Abhimanyu, Dhananjaya, Upendra, Biswanath Khuntia, Jadumani, Kavisurya Baladeva, Gopal Krushna and Brundabati Dasi.

(c) Modern—Radhanath, Madhusudan, Phakirmohan, Gangadhar, Biswanath Kar, Gopabandhu, Chintamani, Nandakishore and Kuntalakumari.

Distribution of marks:—

Text (General questions and explanation)	40
History of Oriya literature	20
Grammar	10
Alankar	10
Chanda	5
Essay	15
Total	100

Sanskrit

(a) Texts—Hitopadesh—Mitralabha—Raghuvansa—Canto XIII.

(b) Grammar—General knowledge of grammar equivalent to the matriculation standard—Vyakarana Sangraha.

(c) Translation from Sanskrit into the Vernacular and vice versa.

(1) Into Oriya—From the prescribed text.

(2) Into Sanskrit—Translation equivalent to the matriculation standard.

Principles and Methods of Teaching (As in the syllabus in education for the I.A. Examination)

(a) Principles: Fifty marks will be allotted to questions based on the following syllabus:

Teaching as an art and as a science. The general facts of mental life and their bearing on the learning process, instinct and emotion; sensation, perception, conception; judgment, imagination, attention, memory, character and will. Habit formation. The foundation of method—general and special; the principles underlying the Kindergarten, the Dalton, the Montessori and the Project Methods, the Wardha Scheme and playway in Education.

(b) Methods: Fifty marks will be allotted to questions on three of the following of which (vi) must be one; carrying 20 marks.

(i) The teaching of English; (ii) The teaching of Mathematics, (iii) The teaching of History, (iv) The teaching of Geography, (v) The teaching of Nature Study, (vi) The teaching of the Mother Tongue.

School Administration and Hygiene (As in the syllabus in Education for the I.A. Examination)

(*a*) School Administration: (1) Functions of a school. (2) Moral training; Corporate life. (3) Punishments and reward. (4) Co-operation between parents and teachers. (5) Qualifications and duties of Headmaster and Assistant master; Specialist and Form Master; Staff Meetings. (6) Classification of pupils; Examinations, Promotions. (7) Time-table. (8) Schemes and notes of lessons. (9) Text-book, pupils' exercises and note-books. (10) Library. (11) Class, staff and general.

(*b*) Hygiene: Air—Impurities in air and their origin. The need for pure air. Ventilation and its importance. Cubic air space in class-rooms and hostels. Breathing habits and posture. Exercise, recreation, rest, sleep.

Water—Sources of water supply—how water gets polluted—how to prevent the pollution of water—purification of water. Water-borne diseases.

Food—Good and bad food. Contamination and adulteration of food. Diseases due to over- and under-feeding. Drugs and stimulants. Conservancy in schools and hostels—Latrines, urinals, drains.

Diseases—Cholera, measles, small-pox, plague, tuberculosis, malaria—their causation, prevention and arrest. Hygiene of the ear, eye, nose and throat. Minor ailments of these organs and how to avoid them. Skin diseases.

(*a*) Food and Nutrition, proximate principles of food vitamins and their use; Balanced diet; planning of diets and diseases due to food deficiency.

(*b*) Junior Red Cross and its work.

General Science and Nature Study

(*a*) General Science—Measurements.

Measuring weight capacity, time, water, air, heat, weighing common solids.

Water: Sources, water-sheds, springs, wells, tanks, rivers, purification of water from suspended matter, use of water in washing, hard and soft water, solution, boiling pulses. Water finds its own level, spirit level of the Mistri, water presses in all directions, pressure varies with depth. Dams, dykes and embankments.

Heat: Familiar temperatures, room temperature, outdoor temperature, temperature variations from day to day (daily weather chart), blood temperature, boiling of water, constancy of boiling point, applications in cooking, what happens to the water that boils off, steam, distillation of water and wine, evaporation of salt or sugar solution (cane juice). Ice and its constant melting point. The three states of matter. Effect of heat on bodies (burning, melting, expansion), why smoke rises, convection currents and ventilation, trade winds, monsoons, land and sea breezes.

Construction of the Thermometer: Drying up of liquids, drying of wet clothes, humidity (weather chart), cooling effect of evaporation, use of fans, cloud, mist, rain, dew.

Air: Importance to life (experiment with mice), air has weight, the atmosphere and atmospheric pressure, bicycle pump and the principle of its working, valves, siphons, measurement of atmospheric pressure, barometer, weather chart.

Distribution of heat: Conduction, good and bad conductors, choice of clothing in summer and winter, selection of materials for cooking vessels, building materials, storing ice, thermos flask. Radiation, how heat reaches us from the sun and from a fire, colours of clothing, why things to which heat is supplied do not continue to grow hotter and hotter. Expansion of solids on heating. Steel rails, joists, bridges, fitting iron tyres to wheels.

Friction: Everyday examples, lubricants, ball bearings; why sand is sprinkled on tarred roads; brakes.

Fire: Importance of the fire to man, starting a fire, ignition point, striking a match, principle of "Lighting" a fire, study of a burning candle; establish experimentally that fire needs air; does it use up any air? Is any air left after a flame has gone out in a closed space? Burning and rusting, oxygen, nitrogen, the residue left after burning. Protection from rust, linseed oil. Burning and breathing, gas produced identical in both cases. Carbon dioxide, its detection; pure and foul air. The common illuminants, vegetable oils (castor, mustard, and mineral oil, the primus stove, arrangements in a kerosene lamp; the incandescent mantle.

Soda: Common washing soda, its action on vegetable colouring matter like turmeric, its use in cooking, water-softeners, alkali, soap. Acids in fruit-juices; lemon, tamarind, vinegar. Tests of an acid, combination of acid and alkali.

Lime: Different forms of limestone in nature (marble, kankar, shells), lime-kilns, slaking of quick-lime, use in white-washing and mortars, cements.

Light: Various ways of producing light; light without heat; light travels in straight lines; shadows, pinhole-camera. Mirrors and reflection, opaque, transparent and translucent bodies. Analysis of white light by prisms. Lenses and bending of light, the lens in the eye, spectacles. Camera, how a cinematograph works. Effect of sunlight on plants and animals. How a photograph is taken.

Mechanics: Illustration of mechanical principle from the bicycle (lever, wheel and axle, ball bearing, lubrication, transmission of power by gearing brake, valve, pump).

Gas pressure: Why water sometimes appears to rise against gravity. soaking up of liquids, porosity of materials, sponge, blotting paper, capillarity experiments, soil, fountain pens, lamp and candle wicks.

(b) NATURE STUDY

Plant life: Structure of seeds, germination, root, stem, leaf, flower, pollination and fertilisation, fruit.

Water plants, plants of dry regions, parasitic plants, moulds, fungi, mushrooms, plant products.

Plant food, manure, drainage, rotation of crops.

The palm, grass, pea, mustard and gourd families.

Animal life: General classification (vertebrates and invertebrates). The skeletal, muscular, circulatory, respiratory and digestive system in a mammal.

Study of pond life in aquaria (frog-spawn crabs, tadpoles whelks, snails, mussels, prawns, mud-fish, turtles, etc.).

Adaptation of legs and beaks of birds to their habits.

Metamorphosis in insects. House-fly, mosquito.

Study of natural objects in nature study rambles.

Keeping a small garden to illustrate the lessons on plant life.

Inanimate nature study: Continuous record of observations of temperature, atmospheric pressure and rainfall.

Study of weather report in the daily paper.

Dew, mist, cloud, winds, cyclones and anti-cyclones.

Altitude of the sun at midday, at sun-rise and at sun-set.

The river in the rains, sedimentation, weathering, different kinds of rocks and soil, stars of different magnitudes, 'shooting-stars', 'Milky way', nebula, Great Bear, Pole Star, Little Bear, Orion, Sirius, stars and planets.

Note.—Students are also required to maintain nature diaries and to record therein their observations of plants, animals, and natural phenomena. Inspecting officers will inspect and sign these diaries at the time of their visits. The headmasters will submit the diaries by registered post direct to the examiner a week before the examination. The examiner will send back the diaries after valuing them and drawing up his report about the work done in the different schools for the consideration of the School Examination Board and the Inspecting Officers concerned. Suggestions regarding these diaries are attached.

SUGGESTIONS REGARDING NATURE DIARY WORK

In order to have systematic observation the following lines of procedure may be found useful. The observations should be divided into two parts, (i) the observation of natural objects, especially the living forms—plants and animals; (ii) a continuous observation of weather. For this purpose it is necessary to maintain two note-books separately and to name them 'Life observation' and "Weather observation" books.

Life Observation: These observations should be in a systematic series. Observations should be made on one half of the page and sketches drawn from actual objects observed on the other half. The number of objects observed should be at least 30. Care should however be taken that observations do not expand into essays; they should be real, and clear. Observations in series of an object which is growing may be counted for more than one. This will depend upon the times of the observations made. The following will give an idea of the observations :—

(i) A seed and its germination. This will mean a detailed study of the seed, when it is dry, soaked in water, sprouting, germinating, etc. till it is a full-grown plant.
(ii) The roots of plants and their kinds; taproot, adventitious root, aerial root, special modifications of roots.
(iii) The stems of plants, their various kinds and modifications.
(iv) The leaf and its modifications.
(v) The flower, its parts and modifications.
(vi) The fruit and its kinds.
(vii) Typical plants, flowering plant, ferns, moss, fungi, as these are given in the nature study syllabus.
(viii) Animal life.

Various kinds of insects, e.g. butterflies and cater-pillars. The growth of the butterfly from the egg stage to the adult stage. Various kinds of beetles; their adaptation to the life they lead; the growth of mosquito from the egg; the development of the frog from frog's spawn. Observations may be made even of higher animals, e.g. horse and cow, but peculiarities are to be deduced and their relation to the habits of the animals. Mere narration of facts is very easy; all children do it. A scientific explanation, however, is required from a grown-up student, who should try to show relation with the environment. Observation should be real and not imaginative, such as the observation of the ostrich and African camel from a picture. If a fish is observed, a mere enumeration of the parts will not do. Explanations must be given of the advantages of possessing a boat-shaped body; transparent and fixed eyelids, absence of external ears; gills and fins; The relation with the particular environment is to be shown. It is very difficult to limit the life observation since it will depend upon the particular situation of the school.

Weather Observation: Weather observation is also an important part of nature study work. Candidates are required to maintain a weather chart in a prescribed form for one year at least.

It will be seen that there are a number of observations to be made. The apparatus required is a good watch to be set right daily; a weathercock; dry and wet thermometer; maximum and minimum thermometer, a barometer and rain gauge. This apparatus should be placed at a covenient spot in the hostel and a monitor should be elected from

amongst the second year students to look after it and the weather record. A sheet of paper in which distinct columns are made, as is suggested in the chart, should be hung near the apparatus. The observation of the weather for a week may be divided among, say, seven students, each observing a different item.

Observations should be written daily and the other students should jot these down on their own books. After a week, the next seven students of the first year should take charge and continue the observation. Thus when all the students have finished one round in a month, changes should be made in the items of observation of each student, i.e. a rotation of work should be instituted, so that the first year students should know all the observations.

In order to make use of the weather observation, summaries should be written at the end of the month, and monthly graphs of daily average pressure and daily average temperature worked out by the students. Student should find out the relative humidity.

Sketches should be plain and pencil shading has been found appropriate. The following distribution of marks is suggested for the nature diaries :—

Diaries—Life observation	10 marks.
Weather observation	10 „
Sketches	5 „
Total	25 marks.

Note (1): The distribution of marks in 'General Science and Nature Study' will be as follows :—

General Science	40 marks.
Plant and animal life	20 „
Inanimate Nature Study	15
Nature Diary	25 „
Total	100 marks.

Note (2) Private candidates are not required to produce nature diaries. The marks which they obtain for the rest of the paper on General Science and Nature Study should be multiplied by 4/3.

8. *Drawing*

Drawing from nature and either model drawing (with pencil shading) or brush work. Chapter 12 of Macnee's Instruction in Indian Secondary Schools should be consulted for the method.

9. *English (Compulsory Refresher Subject)*

Note: The plan of work should have a three-fold purpose:—

(1) To stress the professional aspect of the course through training pupil-teachers in the adoption of modern methods of teaching English.

(2) To help teachers under training to use idiomatic English with confidence and ease.

(3) To provide a supplementary course in English language and literature, emphasis being laid on appreciation of beauty.

* * * *

1. (i) Intensive study of selections in prose and poetry prescribed by the School Examination Board.

(ii) Memorisation of verses of special excellence in the above selections.

2. Extensive reading; one book of travel and adventure and one novel prescribed by the School Examination Board.

3. Original composition: Essays based on the texts and on current topics, school correspondence, debates, recording of minutes and reports of meetings. Editing the school magazine. Writing short plays of one or two acts.

4. Grammar and rhetoric: Applied grammar of the portions prescribed to be taught in the middle school.

Paragraphing.

Precis-writing based on text-books for intensive and cursory reading. The use of idioms and phrases. Figures of speech, simile, metaphor, personification, hyperbole, synecdoche, metonomy, irony, alliteration and transferred epithet. The elements of English versification. Syllables and feet-meter—the stanza and the rhyme.

The correlation between the terminology of English grammar and rhetoric and that of the mother-tongue.

Distribution of marks for the paper in English will be as follows:—

1.	Prose and Poetry text for intensive study	50
2.	Substance from books recommended for non-detailed study	15
3.	Grammar and General composition	15
4.	Essay	20
	Total	100

Mathematics:

A paper on arithmetic, geometry and mensuration based as regards the first two subjects on the compulsory, and as regards the last sub-

ject on the additional mathematics paper for the matriculation examination.

Note: The distribution of marks will be as follows:—

Arithmetic	40
Geometry	30
Mensuration	30
Total	100

History:

(*a*) Outline of World History	40
(*b*) Indian History from 1857 to modern times	30
(*c*) Civics	30
Total	100

Syllabus for civics:—

(1) The aim and scope of civics as a subject in elementary schools.

(2) A study of the requirements of the departmental syllabus for elementary schools.

(3) Aids to the teaching of Civics:—

(*a*) Illustrations, verbal and pictorial.
(*b*) Use of pictures, charts, diagrams and models.
(*c*) Visits to institutions to study their working.

(4) Expression exercises for pupils—

(*a*) Projects, including dramatization.
(*b*) Pupil-government.
(*c*) Sketching, drawing and modelling.

(5) The teachers' preparation—

(*a*) The teachers' acquaintance with (i) the progress on human society and its institutions and (ii) the essential features of various forms of Government.
(*b*) Teaching notes.
(*c*) Equipment, Manuscript and scrap-books of information. Collection of pictures, charts and diagrams.
(*d*) Practical training in organising visits to institutions and recording of investigations.
(*e*) The teachers' own discharge of duties as a member of a civic group.

Practical work

(1) "A model village" project.

(2) Maps of locality showing civic amenities.

(3) Visits to study the working of a panchayat, a municipality, a co-operative society, post and telegraph office, etc.

(4) Collection and preparation of the material shown under equipment above.

(5) Use of receipt and remittance forms in various civic institutions.

Geography:

As in the paper for the matriculation examination.

Note: The distribution of marks will be as follows:—

Physical and astronomical geography	40
India	35
The world	25
Total	100

UTTAR PRADESH

In Uttar Pradesh, the training of undergraduate teachers is done by the Department and a certificate, known as C.T., is awarded at the end of a two years' course. The detailed rules regarding this course are given below:—

1. *Admission*: Candidates for admission must have passed at least the High School Examination of the Board of High School and Intermediate Education, United Provinces, or an equivalent examination recognised for the purpose, and must not be below 17 or over 26 years of age on 1st July of the year of admission and must have resided for three years in the United Provinces immediately preceding the application for admission.

2. *Course of Training*: This will be a two-year course only, and will consist of three parts:

Part I: Practical teaching—Each student will be required to attend a school for work in practical teaching, to give criticism lessons; and to attend criticism and demonstration lessons under the supervision of the staff.

Part II: Theory of Education—Educational Psychology; the application of Psychology to Education; Principles and Methods of Teaching; Modern Developments in Education; School Organisation; Hygiene, and History of Indian Education.

Part III: Study of the following subjects—(Partly with a view to the professional training of the students and partly with a view to continuing their general education).

English (including sound production, reading, recitation and conversation), Arithmetic, Physical Training, Blackboard writing and sketching, and two of the remaining subjects.

3. *The Teachers' Certificate Examination*: The examination shall consist of two parts; a test in theory and a test in the practice of teaching.

The test in theory shall be conducted by means of the following written papers, which shall be set and examined by examiners appointed by the Education Department:

1st Paper—Education Psychology (3 hours—100 marks).

2nd Paper—Principles of Teaching, History of Indian Education (3 hours—100 marks).

3rd Paper—Methods of Teaching (3 hours—100 marks).

4th Paper—School Organisation and Hygiene (3 hours—100 marks).

The minium marks required for a pass shall be 36 per cent of the aggregate marks and 20 per cent of the total number of marks in each paper.

In the practical test each candidate will be required to give a lesson in the presence of two examiners. The subject to be selected by the Principal out of a choice of two or three submitted by the candidates.

A practical examination in Art and Craft or Agriculture or Music or Physical Training will also be conducted at the time of practical examination. A student cannot offer more than one of the above subjects but a student not taking up any will be required to give a second lesson in one of the subjects prescribed.

Note: Students shall be required to put in not less than 100 periods of teaching during the two years. In addition students will be required to attend observation lessons as may be required by the Principal.

The total number of marks for the test in teaching and practical examination will be 200.

4. *Grades of Certificates*: Successful candidates in the theory of teaching shall be arranged in three divisions as follows:

First class—60 per cent of the aggregate marks in Theory.

Second class—45 per cent of the aggregate marks in Theory.

Third class—36 per cent of the aggregate marks in Theory.

Successful candidates in the Practice of Teaching shall be arranged in three divisions as follows:

First class—65 per cent of the aggregate marks in Practice of Teaching.

Second class—50 per cent of the aggregate marks in Practice of Teaching.

Third class—40 per cent of the aggregate marks in Practice of Teaching.

The class obtained in Theory and in Practice of Teaching shall be marked separately on the diploma.

Paper I: Educational Psychology

(1) Aims of Education; Psychological, Ethical and Sociological.

(2) Place of Psychology in the Theory and Practice of Education.

(3) The stages of physical and mental development; physical, mental and emotional characteristics during childhood and adolescence.

(4) Important instincts and their education utility; emotions; sentiments; and complexes; repression *vs.* sublimations.

(5) The child's personality; influence of heredity and environment; place of instincts and habits; character and will; scope and limitations of the educator.

(6) Perception and observation; the apperception mass; sense training.

(7) The economy of attention; fatigue and its treatment; the doctrine of interest in education.

(8) Memory and association; thinking; reasoning and imagination; the psychology of learning; the doctrine of formal training.

(9) The individual and the group; psychology of the group play; psychology of individual differences.

(10) Mental measurement; individual and group tests of intelligence; temperament and character tests; the problem of precocious and retarded children.

(11) The objective viewpoint in Education; educational experimentation and investigation; methods of measuring the results of teaching; place of mental and scholastic tests in the scheme of education.

Paper II: Principles of Teaching and History of Indian Education

The paper will be divided into two parts:

(*a*) The Principles of Teaching, carrying 65 per cent marks, and

(*b*) History of Indian Education, carrying 35 per cent marks.

Section (*a*)—

(1) Individual *v.* class teaching; the problem of individual differences.

(2) Different methods of teaching, viz. inductive and deductive, analytic and synthetic, Heuristic and Socratic, their nature, purpose, uses and limitations.

(3) Planning of lessons, Teachers' diaries; notes of lessons; the Herbertian steps and their modern modifications.

(4) Teaching devices and apparatus; text-books, charts, questions and answers; illustrations; visual aids; class records and exercises: home work; correlation of studies.

(5) Modern developments in pedagogic practice; practical activity methods; Basic system of the United Provinces; individual methods;

the Dalton Plan; play-way methods; Montessori Method; the project curriculum.

(6) Use of the library.

Section (b)—

History of Indian Education from 1830 upto the present day in outline, with special reference to the United Provinces.

Paper III: Methods of Teaching

The paper will contain at least two questions on each of the following subjects:

English, Hindi or Urdu, Mathematics, Social Studies, General Science, Art and Crafts, Agriculture, Physical Training, Music.

Paper IV: School Organisation and Hygiene

(1) The school organisation; Headmaster and his staff; distribution of their work and responsibility.

(2) Admission and classification of scholars; basic principles.

(3) Method of recording progress of scholars; tests and examinations; general principles of class promotion.

(4) Time-tables and other schemes of work.

(5) Teachers' records; home work and pupil's note-books.

(6) Discipline and Class Management; old and new conceptions of discipline, fear and obedience; rewards and punishment; freedom; control and guidance of pupils' activities.

(7) Physical training, organised games and recreations; extra-curricular activities, e.g. Scouting and Junior Red Cross; Parental and public co-operation.

(8) Class-room fittings and furniture: library, museum and laboratory, hostel, gardens and playing fields.

(9) An outline of the human body with special reference to the peculiarities and needs of childhood; the circulatory, digestive, excretory, and nervous systems.

(10) Conditions influencing growth and development; children's postures; fatigue; lighting and ventilation; personal cleanliness; care of eyes, ears, teeth, etc.

(11) Simple injuries and their treatment, first-aid, common ailments and how to recognise them; common infectious diseases and their prevention.

(12) Medical supervision of school life, sanitation of the school and hostel buildings.

MADHYA BHARAT

On the model of the State of Uttar Pradesh, the Education Department of Madhya Bharat also conducts two examinations—L.T. for graduates and C.T. for undergraduates. The following is the list of institutions where the above courses are conducted :

(1) L.T. College, Dewas.

(2) C.T. College, Jaura.

(3) Teachers' Training School, Morar, Gwalior.

(4) Normal School Bijalpur, Indore.

(5) Malava Kanya Vidhya Bhawan, Indore. (For Women)

(6) Shikshika Shikshan Shala, Gwalior. (For Women)

The Registrar, Departmental Examinations, Madhya Bharat, Gwalior, conducts these examinations.

PART III

PAPERS READ AT THE CONFERENCE

ITEM No. 10 ON THE AGENDA

EDUCATIONAL JOURNALS IN INDIA

By

Shri M. VARMA,

Principal, University Training College, Nagpur.

There is a disadvantage in having an experienced body of men and women for audience ; it is that you frequently catch yourself explaining the obvious and are generally short of anything new to say. But there is a distinct advantage too ; in that you need not dilute your meaning with explanations ; you can avoid clap-trap and you cannot afford being merely doctrinaire.

My own qualifications to address you on the theme of Indian educational journals are mostly negative, for I seem to have a rather strong disinclination to read most of them and have specialized in discovering for myself only the kind that one could, with pleasure, avoid reading. My experience thus constitutes an indirect commentary on the state of educational journals in our country, and I cannot for the asking undertake to speak of the virtues of Indian educational journals. But manifestly even the devil's advocate has his uses. I, therefore, address myself to my task with no special misgivings. I draw solace from the fact that, with you, I need not be long-winded and wordy in what little I have to say.

In the first place, then, let me briefly state what I consider to be the position of Indian educational journals at present. Most of these journals are meant for educationists and for those who are interested in education non-professionally. They are produced for a clientele that is at best vaguely defined. This is partly due to a desire to cater for all sorts of readers and thus make a wider appeal and draw in more custom. A journal with a limited appeal generally becomes a liability and does not run itself. The journals, therefore, serve the entity called education in a vague and amorphous way ; whatever the formal purpose may be, they actually publicise the views

of only a few afflicted with the writer's itch. They offer, therefore, a varied fare ranging from sheer 'splurges' to closely argued or elaborately documented work or reports on actual investigations and experiments. In the selection of articles the editors cannot use very astrigent criteria either because they lack the ability to evaluate all kinds of material or because they rarely have enough of good things to discard the bad. The result is that an indifferent quality of issue is the rule, a really good article appearing only as a rarity at long intervals. Writers on their side, faced with demands of editors for contributions and not unwilling to see their name in print develop the habit of writing up any stray notions that strike them as worthwhile. For a good article or report can only be produced after some very conscientious toil, for which very few have the time. Only a few journals pay for articles they publish and so the writers do not feel compelled to bother about quality. Armchair philosophizing is the keynote of our articles. Such writing may be the prerogative of Gandhi and Tagore; but it should not be the free romping ground of everyone who can wield a pen. Even stylistic deficiencies are not uncommon. The financial position of most journals is unsound and the best merely meet expenses.

This, then, is the general picture of what we have today in journals. It is true that some journals are valiantly fighting for standards and it is these that need all our moral support and such State-aid as may be possible. In some advanced States, journals have been started by Government Departments, in others by private bodies and organizations. A few of these aim at quality, have better resources and form the vanguard of educational journalism. Even of these it cannot be said that they have a clearly defined purpose or policy. They all seem—as the phrase is—'to serve education' Practically none specialize in special aspects of education. The non-existence of such journals is due to the lack of reading public with specialized interests and specialists who can contribute.

I believe for some time to come we cannot have journals devoted to special aspects of education in any large numbers, but the fields that can be served by such journals are many.

We need reading matter of an informative and instructive kind for parents and children, for the teachers of infant and primary education, for teachers at secondary and collegiate levels, besides journals dealing with experimental work, educational and psychological statistics, educational research, women's education, education of the handicapped, the various school subjects each of which should have a journal devoted to itself. This pre-supposes a quantity of work turned out every year by men and women engaged in education all over the country. This work is not being done. Whatever the reasons, our educators, in their day-to-day life, are unable to go beyond the discharge of their quotidian duties. If educational journalism is to flourish in these varied fields the reform has to begin in educational institutions. It appears to me that we are caught here in a vicious circle—we can never reach these potential workers as we stand at present, and failing that, their potential can never become real. It seems the crass complacency of our educators has jammed the wheels of our progress.

The greater pity is that State Governments who can help break this circuit appear rather apathetic to our efforts and salve any rare stirrings of conscience by 'approving' a few of the more influential and enterprising journals or by starting some sort of an organ of their own. Now I, for one, am never in favour of State-owned journals in education. The modern State and local bodies play too significant a part (or at least should) in education to hope for an impartial and fearless conduct of a journal. Besides, the function of the State and local bodies is to regulate and provide and integrate education. It should not directly undertake justification of its acts and policies. This function with the allied one of carrying out experiment, conducting research and making critical assessment of effort and plans should belong to workers untrammelled by regimental considerations. Even a State officer as an individual can contribute his findings or views to an independent journal and if his intentions are above suspicion, he may survive the rashness ; but a journal turning back upon itself boomerangwise to carp at or praise its own parent is an unheard of thing.

On the other hand, the State and local bodies can do much to help sensible educational journalism by promoting sales after examining claims. The eye-wash procedure of ' approving for schools and colleges ' is not of much use unless the schools that can afford, do buy the recommended journals. In this drive the State should help, if possible, by sharing a percentage of cost with schools. It might call for statistics of journals prescribed and then find out if the right type of journal is being adequately subscribed. For, quite often, the schools subscribe a journal which manages to have a pull on them. I feel we ourselves are in a very chaotic state and it will do us no harm if some of our journals were suppressed. For we need to canalise effort and conserve energy. The State can help in this task of integration, co-ordination and forced economy.

There is yet another aspect of the waste of our energy. Our readers are not always genuine. Not infrequently a journal is received but not sufficiently read. The names of authors are possibly noted with shaking of heads and may be, acid remarks. If a journal is subscribed it should be worth reading and should be read. The schools might hold teacher discussions on the journals of the quarter or the month and articles may be talked on and discussed. The heads should make sure that the teachers do read the subscribed journals—I assume we are talking of the right type of journal here. Actually we have to start by educating our readers in the art of appraising a journal and making the most of the good ones.

You will observe that journals are being published by private persons, institutions, Government Departments, organizations and publishing firms. I think the question who is best fitted to bring out an educational journal is worth considering. I have said the State should regulate rather than run journals. If it has a journal it should be mainly informative —a news-sheet condensed, including periodic statistics. As for private individuals, they tend to develop vested interests in their journals which disqualifies them for the work. Institutions including training colleges often run their own journals. These *belong* to the institutions in a very real sense. They deal with their internal affairs under different sections and air

the virtuosities of the students and the staff. Their clientele does not spread beyond the parents of their charges, if at all that far. A training college is slightly in a different position for the entrants here are themselves teachers or future teachers. The satff and the students can, if they pool their resources, run a journal of modest worth. If the staff is active and able, enough work may be turned out every year to fill the pages of all the issues; but collection of MSS and 'copy' is not the only work the running of a journal entails on the publisher. In fact, a journal is a whole-time job and I do not believe an institution that is really engaged in serious work can afford to find time for it. I feel that the running of such journals is a drain on the energies of the honorary workers (for no institutional journal can afford to pay more than an honorarium to its part-time staff)—and this prevents the colleges from undertaking serious research and experiment in their respective fields.

I think journals will be more efficient in every respect if they are managed by reputable firms of publishers but are edited by experts (wherever they may be found) whose labours are rewarded by 'fair renown' and an honorarium. The firms cannot expect to mint money out of the journals, but what they fail to make as profit they will gain as goodwill through indirect publicity.

While it is only in their own interest for training institutions not to have any financial and business entanglements with journals of a wider circulation, the journals themselves can find no better editors and contributors than among the ranks of the staff of such colleges, provided the colleges realise their responsibility in the field of research and experiment. I must say that, as at present run, these colleges do not through their staff carry out a satisfactory amount of work of a high order. The yearly output of degree theses and trained graduates is the expected routine of these colleges. This should never be enough for any college worth the name. Editorial standards must also improve and they cannot improve until good enough and numerous enough articles are received periodically by the editors technically competent to evaluate and edit them.

The compulsion to take out the journals in English only for India-wide appeal raises the allied question of standards of English. To employ a foreign medium with elegance and ease requires a life-time of practice and training and only a very few can attain the required standard. Yet so long as we use the medium we must maintain this standard. At some future date it may be possible to change the medium when it may be possible for many to write with ease and without peril of inadvertent error. This also raises the question of journals in regional languages. Obviously this class of journal will also come into being to serve a restricted area. Practically no good regional journals exist at present and what there are have precarious finances and low standards.

I have not much further to say ; but before I end, I should summarily re-state the issues that concern us. Firstly, more specialized kind of journals has to be produced so that advanced work of a technical nature is consistently and systematically presented to readers interested in them ; to make this possible, technical interest has to be created among workers in special fields and specialists put to work so that the raw material of articles is available. Secondly, the States and institutions should realise the value of educational journals and their own responsibilities towards them. And finally, the editorial standards have to be raised and the business put into professional hands. I am confident all these and other issues will engage your earnest attention and that in course of time and by the energy of some of us our deliberations will bear practical fruit.

While we strive to improve educational journalism in this country let us remember that Indian education and its achievements will be known in other countries only by the books we write and the journals we produce—and more by the journals than the books. We can ill-afford to neglect this very important side of our educational endeavour.

ITEM No. 5(c) ON THE AGENDA

The Training of Undergraduate Teachers in India for Service in Secondary Schools

1. *Introduction*: It may sound paradoxical, but it is nonetheless true, that the question of undergraduate teacher-training has not as yet received as much attention as it deserves at the hands of State Governments or Universities. Whereas most of our Universities have Training Departments exclusively devoted to the training of graduate teachers, and State Governments have been paying a good deal of attention to the training of primary teachers, the question of the training of undergraduate teachers for service in secondary schools has become the Cinderella of our teacher-training programme. It should, however, be recognised that the training of undergraduate teachers constitutes an important link between the training of graduate teachers on the one hand and that of primary teachers on the other. There are States like Madras and Uttar Pradesh where State-sponsored colleges provide regular courses of training to undergraduate teachers; whereas States like Bombay and Saurashtra have shown little inclination to lend active support to the cause of undergraduate teacher-training. An attempt has been made in this paper to describe the efforts made by some State Governments for undergraduate teacher-training, to make a comparative study of the courses they follow and to offer some concrete suggestions to improve the existing position so as to bring it in line with the training of graduate teachers all over India. For lack of information about undergraduate teacher-training in some States, it has not been possible for me to give a complete picture of training in the whole country.

2. *The Present Position in Some States*: (a) *Bombay*: In Bombay State, no special efforts are made by Government to provide for undergraduate teacher-training. It is true that Government holds a Secondary Teachers' Certificate Examination, but it neither maintains nor supports a single training institution for the training of undergraduate teachers serving in secondary schools. It should be said to the credit of the

Universities in the State that all of them, except the Gujarat University which is still growing, have under their jurisdiction colleges which cater for undergraduate teacher-training. They grant a Diploma in Teaching (T.D.) to the undergraduate teachers who pass the examination after one year's full-time training. The facility for training is not much availed of by teachers because of the heavy expenditure involved in the undertaking and absence of attractive prospects after training. The course extends over one year and such teachers as have passed the S.S.C. Examination held by the Secondary School Certificate Examination Board and have three years' teaching experience in a recognised school or have passed the First Year Examination in Arts, Science and Commerce of a University in the State are eligible for admission to the course. An outstanding feature of the course is the fact that regional languages are the media of instruction and examination with an option to use English.

(b) *Madhya Pradesh* : The Universities of Nagpur and Saugor provide for courses leading to the examination for a Diploma in Teaching (Dip.T.). The course is open to those who have passed the High School Certificate Examination of the M.P. Board of High School Education or an equivalent examination. The course extends over a period of two academic years at a recognised college.

(c) *Uttar Pradesh* Government maintains the Training Colleges of Agra, Banaras, Bareilly, Lucknow and Allahabad under the direct control of the Director of Education, U.P. Candidates for admission to these colleges must have passed at least the High School Examination of the Board of High School and Intermediate Education, U.P. or an equivalent examination, must not be below 17 or over 26 years of age at the time of admission and must have resided in the U.P. for three years immediately preceding the application for admission. Each of the training colleges referred to above has provision for a two-year course at the end of which the Examination for the Teacher's Certificate is held by the Registrar, Departmental Examinations, U.P. and successful candidates receive a Teachers' Certificate in the prescribed form.

(d) *Madras*: Government has devised the Scheme of Training School Leaving Certificate Examination under which Secondary-Grade Teachers are trained at Government and Aided Training Schools. The course of training which covers a period of two years leads to the Training School Leaving Certificate Public Examination. The holders of the T.S.L. Certificate are competent to teach the lower forms of secondary schools. An important feature of the Scheme is the introduction of the mother-tongue as the medium of instruction and examination except where the Director of Public Instruction permits, for special reasons, the use of English. This step is in consonance with the policy of Government to have the mother-tongue as the medium of instruction in secondary schools.

(e) *Mysore*: The Department of Education conducts the Examination for Teachers' Certificate. The examination is open to those who have obtained the Secondary School Leaving Pass Certificate of the Mysore Secondary School Leaving Certificate Public Examination or an equivalent examination, and have gone through the full training course in a recognised training institution.

(f) *Hyderabad*: The course for the Teachers' Certificate Examination extends over one academic year at the Osmania Training College, Hyderabad, or one of the Teachers' Training Schools—Government or recognised by Government. No student who has not passed the Higher Certificate Examination held by the Board of Secondary Education, Hyderabad, or an examination equivalent thereto, is admitted to the course. The Examination for the Teachers' Certificate is held by the Commissioner for Government Examinations.

In the State of Hyderabad, there is also provision for the course for the Intermediate Teachers' Certificate extending over a period of one academic year. No student who has not passed the Intermediate Examination of a University is eligible for admission to the course. Intermediate Teachers' Certificate (I.T.C.) is awarded to the trainees who are successful at the final examination.

3. *A Comparative Study of the Courses of Studies, etc.* It is a sad commentary on our system of teacher-training that

there is no co-ordination among the courses of studies prescribed by different States for undergraduate teachers. Our Universities, barring a few, are totally indifferent to this important branch of teacher-training. Let us have a bird's-eye-view of the courses followed in different States and Universities.

There is no uniformity with regard to the period of training or the courses of studies. In some States, there is only one-year full-time course of training, while in others, the course extends over a period of two years. In some States, there are three or four papers for the Theory Examination, whereas in others there are as many as six or seven papers. The rules of admission to the courses of training reveal that the same qualifications are not insisted upon as a condition precedent to a candidate's admission to the course. In Bombay State, for instance, a candidate is expected to possess least three years' teaching experience in a recognised school before he can enter upon the course of training or he should have passed the First Year Examination in Arts, Science or Commerce of a University in the State. In other States, teaching experience is not always a condition of admission to the course of undergraduate teacher-training.

(a) *Bombay* The Examination for the Diploma in Teaching (T.D.) consists of Part I—*Written Examination* Four papers. Part II—*Practical Examination* Two lessons.

The four papers under Part I are—

I. Elementary Principles of Education and Psychology ;

II. Special Methods (Three out of English, Marathi, Gujarati, Kannada, Sindhi, Urdu, Hindi, Hindustani, History, Geography, Mathematics and Science)

III. General Methods, School Hygiene and School Administration ; and

IV. Twentieth Century Developments in Indian Education.

In Part II of the Examination, the teaching ability of a candidate is judged by a test in two lessons in any *two* out of any three subjects selected by him for Paper II. For practical work done by the candidate during the period of training,

marks up to a maximum of 100 are assigned by the Head of the Training College. Each of the four papers carries 100 marks and the Part II Examination carries 200 marks altogether. To be successful in the whole examination, a candidate should obtain 40 per cent of the total marks separately in Part I and II.

(b) *Madhya Pradesh* : The Examination for the Diploma in Teaching consists of two parts. Part I comprises the following six papers :

I. Principles and Practice of Education ;

II. Educational Psychology ;

III. School Organization and School Hygiene ;

IV. One of the following languages and its methodology : Marathi, Hindi and Urdu ;

V. English and its methodology ; and

VI. Special Methods of Teaching in one of the following subjects :

(*a*) Mathematics and General Science,
(*b*) Social Studies,
(*c*) Home Science,
(*d*) Music, and
(*e*) Physical Education.

Part II The practical teaching of the candidates is judged by their teaching during the period of training and a final test comprising three lessons to be given in each of the three subjects selected for Papers IV, V and VI. Each of the six papers under Part I carries 100 marks. Part II carries 200 marks, 100 being obtainable during the course of training as assessed by the Principal of the Training College and another 100 being obtainable in the Final Test. At least 30 per cent of the total marks should be obtained by a candidate to pass the Part I Examination and 40 per cent of the total marks to pass the Part II Examination. In order to obtain the Diploma in Teaching an examinee must pass in Part I and in Part II.

(c) *Uttar Pradesh* The examination consists of two parts, a test in theory and a test in the practical teaching. Part I includes the following papers :

I. Educational Psychology ;
II. Principles of Teaching ; History of Indian Education ;
III. Methods of Teaching ; and
IV. School Organisation and Hygiene.

Each of the above paper is of three hours' duration and carries hundred marks. The minimum marks required for a pass is 36 per cent of the aggregate marks and 20 per cent of the total number of marks in each paper. In the practical test, each candidate is required to give a lesson in the subject selected by the Principal out of a choice of two or three submitted by the candidate. A practical examination in Art and Craft or Agriculture or Music or Physical Training is conducted at the time of practical examination. A student cannot offer more than one of these subjects, but a student not taking up any is required to give a second lesson in one of the subjects prescribed. The total number of marks for the test in teaching and practical examination is 200.

(d) *Madras* : The subjects of study are divided into two groups, A and B, with a public examination in the A group subjects at the end of the two years' course and with proper provision to ensure a thorough knowledge in the B group subjects in which no public examination is held.

The subjects included in Group A are as follows :

I. Education—Paper I ;
II. Education—Paper II ;
III. English—Methods and Texts ;
IV. Special Methods (non-language subjects)—Paper I—Mathematics and General Science ;
V. Special Methods (non-language subjects)—Paper II—History and Civics and Geography ; and
VI. A Language of the State (Methods and Texts).

The B Group subjects are Music, Handicrafts including Drawing, and Physical Training.

The course also provides ample scope for teaching practice for pupil-teachers in practising schools.

(e) *Mysore* The Examination for the Teachers' Certificate comprises the following papers :

I. Principles of Education ;
II. Methods of Teaching ; and
III. School Organisation and Discipline.

The practical examination consists in the giving of three lessons and a blackboard test.

The maximum marks allotted to each paper is 100. Candidates obtaining (*a*) not less than 35 per cent of the marks in each paper or (*b*) 30 per cent of the marks in each paper and 40 per cent of the aggregate number of marks of all the three papers taken together are declared to have passed the Theory Examination.

Candidates obtaining (*a*) 35 per cent of the marks in each of the Lesson and Blackboard Tests or (*b*) 30 per cent in each of these tests and 40 per cent on the whole are declared to have passed the Practical Examination.

Successful candidates receive the Teachers' Certificate of the Secondary Grade from the Local Examinations Boards.

(f) *Hyderabad*: The Examination for the Teachers' Certificate comprises the following seven papers and a practical test :

I.	Principles of Education and Educational Psychology	100 marks
II.	School Organisation and Hygiene	100
III.	History of Education	100
IV.	Methods of Teaching (English or Hindustani or Telugu or Marathi or Kannada)	50
V.	Teaching of Mathematics and General Science	100
VI.	Teaching of History and Geography	100
VII.	Special Subject	50

Practical

(*a*)	Record of teaching work	75
(*b*)	Teaching of one lesson at the Public Examination	75

Candidates who obtain not less than 30 per cent in each of the papers and 33 per cent in the aggregate of the Theory Examination and 35 per cent in the Practical Examination are declared to have passed the examination.

4. *Some Suggestions for Co-ordination of Courses and Reforms*: It will be obvious from the foregoing review of courses that there is a wide disparity in the courses and facilities for the training of undergraduate teachers for service in secondary schools in India. The following suggestions are offered for bringing about co-ordination among them and improving the existing position :

(*a*) In view of the fact that secondary education is one and indivisible and that graduate and undergraduate teachers differ in degree and not in kind, there should be complete co-ordination between graduate teacher-training and undergraduate teacher-training. It is no small wonder that the former falls within the domain of Universities, while the latter is left in the hands of State Governments. In every University, there should be a Department of Training catering for the training of graduate as well as undergraduate teachers and State Governments should divest themselves of the responsibility for undergraduate teacher-training, it being understood that they place adequate funds at the disposal of the universities within their area for maintaining their Departments of Training. If there is no university in a State, it should seek the co-operation of a university in a neighbouring State for the training of its undergraduate teachers.

(*b*) The terms and conditions of service should be made sufficiently attractive to induce talented men and women to embrace this profession and each trainee should receive not only his college fees but adequate allowances for his maintenance while under training. This must be the first liability on the State exchequer.

(*c*) The course of training should extend over one academic year, leading to the examination for the Teacher's Diploma (T.D.) throughout the whole country.

(*d*) No undergraduate who does not possess at least two years' teaching experience in a recognised school should be admitted to the course of training.

(*e*) In addition to his attendance at demonstration and criticism lessons, every trainee should be required to teach at least four lessons a day for sixty days in the year. Continuous practice for a period of three or four weeks at a stretch is preferable to practice on alternate days every week. It would be highly advantageous, if the teacher under training is entrusted with the duties of a class-teacher for the whole day. A few of the lessons given by him may be supervised by the staff of the college without previous intimation to the trainee. Elaborate notes of lessons covering a number of pages should not be insisted upon.

(*f*) The examination in theory should comprise the following five papers and the topics under each of them should be elementary and easily intelligible to the trainees. It is idle to expect the undergraduates to study the same topics as graduates do:

I. Elementary Educational Psychology ;

II. Principles of Education ; General Methods ;

III. School Organisation and Hygiene ;

IV Outlines of History of Education—Indian and Western ; and

V Special Methods : Any *three* out of English, Mother-tongue, Hindi, Urdu, History, Geography, Mathematics, General Science, Basic Craft.

Each of the above subjects should carry 100 marks.

200 marks should be assigned to the Practical Examination, out of which a maximum of 100 marks may be assigned by the Principal on the basis of the trainee's teaching record during the year and another 100 for practical work in Art and Craft, Physical Training, Blackboard work, etc. There should be no external practical examination.

(*g*) The medium of instruction and examination should be the mother-tongue of the trainee.

(*h*) The Theory Examination should be based on the method of objective tests as far as possible and the essay type

of answers should be assessed by five-point scale. The system of classification of successful candidates according to marks should be dropped. Those who show conspicuous merit should be given distinction in theory or practice or in both as the case may be. This much-needed reform should not be shelved on the ground that it is impracticable or conducive to malpractices. A training college is the proper place for burying the outworn, harmful and useless system of our examinations. It is high time a beginning in this direction were made in our training colleges. Delay in this matter is very dangerous and fraught with disastrous consequences.

M. S. PATEL

Procedure for Discussion

The President has fixed the following procedure for the discussion of this item :—

(*a*) The discussion of this subject will be initiated by Prof. M. S. Patel and not by *Shri Mir Ahmed Ali Khan* as announced earlier.

(*b*) At the end of the discussion which would be conducted as shown in the *Revised Programme*, the matter will be referred to a Committee of which Prof. M. S. Patel will be the Secretary. The Committee will elect its own Chairman.

MADHURI R. SHAH

Organising Secretary.

The Role of the Training Colleges in developing a Guidance Service in Schools

The guidance movement is comparatively new to India. Of the 16 universities which provide M.Ed. courses only four—Allahabad, Benaras, Delhi and Lucknow—have included "Guidance" in the syllabus. Two State governments have shown a practical interest in the matter by establishing guidance bureaus—the U.P. Bureau of Psychology in Allahabad and the Vocational Guidance Bureau in Bombay. Moreover, the Central Government is soon setting up a Psychological Wing in the Central Institute of Education. Besides these, a few private bureaus and Institutes also exist.

New though the movement is, it is likely to grow rapidly, for the need for guidance has been repeatedly stressed in our educational reports. There are many types of guidance activities; in this paper I propose to confine myself to the field of educational and vocational guidance.

Before discussing the role of the Universities in a Guidance Service, it will, I believe, be profitable to describe the functions of an Educational and Vocational Guidance Service. There are six main aspects :

(1) Study of the individuals ;

(2) Collection and dissemination of information relating to courses of studies and jobs ;

(3) Counselling or guidance ;

(4) Placement in jobs ;

(5) Follow-up of those guided ; and

(6) Research.

There are two important agents in the guidance process. The main burden of counselling falls on the shoulders of the Counsellor or Vocational Psychologist. He is assisted by Career-Masters, who are part-time or full-time members of staffs of secondary schools. The Career-Master can assist in several ways : by seeing that proper Cumulative Record Cards are maintained in the school, maintaining a Career library, screening Career films, organising visits to factories,

offices, hospitals, and other places, teaching Occupation courses, administering tests, and giving guidance in simple cases.

The role of the training college is now probably clear. It has a dual function—training the personnel who man the Guidance Service and supplying them with the tools necessary for their work.

Let us first consider the training aspect. The Counsellor needs to be trained at least at the M.Ed. level. The present tendency is to offer one paper on Guidance among the optional papers. This, in my humble opinion, is hardly adequate preparation for the future professional Counsellor. I am of the view that at the M.Ed. stage one should be allowed to specialise—on the lines of the Bombay University syllabus—and that Guidance should be one of the special fields.

As for Career-Masters their training should be a very practical one, directly related to the nature of their work. Needless to add, every B.T. Syllabus should include the essentials of educational and vocational guidance.

The second function of the training college, as already indicated, is supplying the tools necessary for guidance. Standardisation of tests should, therefore, be an important contribution of the training college. The tests useful for guidance are tests of intelligence, aptitudes, attainments, personality and interests. The training college should also encourage research on methods of recording the achievements and personal qualities of the pupils. Again, some universities require a long essay or dissertation as part of the M.Ed. course. Instead of preparing a learned discourse on a topic which does not have much practical value—for instance, the educational ideas of Swami Anandanand of the 6th century—students could make a study of the requirements of the various occupations and thus help to fill up a tragic gap in our knowledge.

There is a lot of talk about developing the natural resources of our country. Not enough attention has been paid to the problem of developing our *human* resources. If our dreams about the future of India are to come true, it is high time we wake up from our lethargy and introduce the vitally important subject of Guidance in all our universities.

F. S. CHOTHIA

TRAINING OF GRADUATE TEACHERS IN INDIAN UNIVERSITIES

By

Principal AMY B. H. J. RUSTOMJEE,

Secondary Training College, Bombay.

The *object* of this paper is to make a comparative study of the regulations and courses for the training of graduate teachers in Indian Universities and to suggest some broad principles on which reforms will have to be based.

2. *Nomenclature* Out of the 24 universities which provide courses for graduate teachers, 17 award the B.T. degree. The name next in popularity is the B.Ed. degree which is really to be preferred to B.T.

Two universities confer a Diploma-in-Education. Since some universities confer a Diploma-in-Education or a Diploma-in-Teaching on undergraduate teachers, there is some confusion. It is not always clear whether a diploma-holder has undergone a graduate or undergraduate training course. It would, therefore, be desirable for the universities to confer a *degree*, rather than a *diploma*, at the end of a graduate's training course and such a degree should be that of *Bachelor of Education and not that of a Bachelor of Teaching.*

Since there is no restriction in this country on who may or may not teach, the term *Licentiate-in-Teaching* is meaningless and hence the L.T. degree should also be changed to the B.Ed.

3. *Conditions of Admission* : A study of the regulations of the universities on this subject which I was able to obtain and which have already been circulated show two important features. On the one hand, some universities impose unnecessary and unjustifiable bans on admission. The University of Rajputana, for instance, observes that " a person who passes the B.A. examination in English only or takes the Master's Degree in a language after passing the B.A. examination in English only shall not be eligible for admission to

the examination for the B.Ed. degree ".* This is ununderstandable. I hold that universities should not impose any restriction on the basis of the teacher's subjects at the degree examination. Obviously, the training colleges will see that a candidate has enough knowledge and grasp of the subjects in the teaching of which he desires to specialise. This ought to be enough for all purposes.

On the other hand, the regulations are silent on some other conditions which I consider essential. For example, I do believe that a teacher should have about a year's experience of independent school teaching *before* he is admitted to a training college. This gives him confidence in facing a class and he comes to the college with some problems from his experience. At the same time, a man who has had too long an experience of teaching—say about 10 years—does not profit much from a course of training. He has to unlearn a good deal; he has lost his adaptability as well as habits of study; and, therefore, it should be a policy of Government to see that every teacher is sent in for training within about five years of his joining the profession. The universities can and should make regulations prescribing the minimum teaching experience required; but it is for the Education Departments to make and enforce such regulations as will compel the managements of schools to depute every teacher for training by the time he has put in five years' service, as a teacher.

Though I have advocated the minimum teaching experience of about a year before admission to a training college, I do realise that there are a few keen young people, fresh from college, anxious to enter the profession. Such people should be admitted even though they have not had any experience of independent teaching. However, even in such cases, the trainees should be required to obtain the necessary experience before they are admitted to the practical part of the examination. In the universities of the State of Bombay, there is a rule to this effect. I did not find any similar rule in the other universities.

But teaching experience is not the only point to be considered while admitting teachers for training. Several other

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* Page 176.

factors such as age, physical fitness, the existence of certain defects such as a stammer, a squint eye, or deafness, which unfit a person from being a teacher, personality, temperament, etc. have also to be examined. I do realise that it is difficult to frame exact regulations on these matters. But it is here that the Principal and the staff should have a free hand in their selection. They should make it an invariable practice to interview every candidate seeking admission. I also feel that it would be worthwhile to devise tests covering all the aspects of the suitability of a candidate for the teaching profession. Nowadays when we have to admit to the profession almost every person who knocks at its door and when the remuneration we ordinarily offer keeps out most promising youths from it, all *selection* can only have a negative value in the sense that we can weed out some persons whose admission will adversely affect the education of hundreds of children. But even this service is worthwhile and it is the duty of training colleges to render it to the community.

One more point about admissions. I am strongly opposed to any selection of teachers on communal or sectarian considerations. I do feel that, for the teaching profession, we should choose the best people from amongst those who offer to enter it.

4. *Duration* : The duration of the course is everywhere one year. I agree to this. But what we do not generally realise is that the actual working period is far shorter—only 7 months and 20 days (20th June to 10th October and 10th November to 10th March). If allowance is made for the inevitable loss in the opening days and for other holidays, we generally get only about 7 months or less which is far too short a period to do justice to all the theory and practice that is crammed into an average syllabus. I feel that we must have at least nine clear months of work. We may begin on 1st June and end on 15th October with a mid-term break for a week. Then we may have a month's vacation, begin on 15th November and go right up to 15th April with a break of a week at Christmas. The proposal involves a greater strain on training college staff in comparison with the staff of other colleges; but some sort of financial or other compensation

might be arranged for this. I do think that the proposal deserves very serious consideration.

I do not like the idea of cutting down the B.T. course to a shorter period as is done in some places. For instance, a three-months' training course is organised in Madras for teachers having a prescribed period of experience. In Calcutta, a teacher can appear for B.T. without attending a college under certain conditions; similarly, I do not approve of the proposal, sometimes entertained, of allowing teachers under training to accept service. I feel that the B.T. course should be a whole-time course of one year. That is the very minimum period necessary if justice is to be done to the curriculum.

5. *Syllabus in theory* The number of papers to be offered in theory varies from university to university. While some universities prescribe four papers, a majority prescribes five; and the university of Mysore prescribes as many as six. I feel that the burden of theory is far too great in view of the short time at our disposal.

I feel that there should be only four compulsory papers. The practice which prevails in some universities of providing for a special paper which is to be taken only by those who wish to do so is really good and deserves general acceptance. In drawing up the syllabus, the largest possible option should be allowed in this special paper.

Coming to the content of these four compulsory papers, I suggest that they should include the following subjects which every teacher must know:

(1) Educational Psychology (including elementary experimental psychology, and mental testing).
(2) Principles (or Philosophy) of Education.
(3) General and special Methods of teaching School subjects.
(4) School Organisation.
(5) Problems of Indian Education.

I would not like to suggest any definite combination of these subjects into the 4 papers proposed. This is an area where a

variety of experimentation should be encouraged, on principle.

For the special paper, the following may be considered as optionals (amongst others) :—

(1) History of Education.

(2) Statistical methods applied to education.

(3) An advanced course in any of the subjects included in the compulsory part.

(4) Comparative Education.

(5) Detailed study of some outstanding educators.

(6) Basic Education.

(7) Adult Education.

(8) Audio-visual Education.

(9) Vocational and Educational Guidance.

(10) Juvenile Delinquency.

(11) Mental Hygiene and School clinics.

(12) Education of the gifted and the subnormal children.

6. *Syllabus in Practice-teaching* In Calcutta, a teacher has to specialise in 3 subjects. The practice in a majority of universities is to require specialisation in two subjects only. This ought to be enough.

There should be no restriction regarding the subjects to be selected for specialisation (as in Andhra, for instance). The question should be left to the discretion of college authorities who, it is presumed will see that the teacher under training has a sufficient grasp of the subjects he proposes to teach.

Coming to the question of supervised practice-teaching, I find that the present position requires improvement on two lines. The advantages and disadvantages of continuous practice on the one hand and isolated lessons on the other are well known and I need not discuss them here. What we really need is a combination of both the systems in a suitable proportion and this we do not have anywhere. Secondly, the number of isolated lessons is, in some cases, much too great (60 lessons) and in others, it is too meagre (5 lessons). I, therefore, propose that we should reorganise this aspect of our work on the following lines :—

(1) Every teacher under training should be required to do continuous teaching (i.e. he should be considered to be a member of the staff and undertake all such curricular and extra-curricular duties as may be assigned to him) for a period of two weeks. During this period, the student-teacher will be under the general supervision of the Head of the school in which he is giving the lessons. The members of the staff of the training college would visit his classes, note his work, and give him such criticism and guidance as may be necessary.

(2) In addition to the continuous teaching described above, each student-teacher should be required to give 20 lessons (10 in each subject) under supervision.

This is a field in which there is great scope of experiments. The training colleges should try out different experiments and circulate, among themselves, the results thereof. In the periodical conferences of training colleges, the papers on such experiments should be read and discussed.

As a rule, practice-teaching, whether continuous or isolated, should be done in classes of not less than 15 pupils.

7. *Practical work other than practice-teaching* The practical work to be done by a student-teacher should include, in addition to practice-teaching, the following items :—

(i) Writing of six essays on educational topics ;

(ii) Devising attainment tests for a particular class in the subjects selected ;

(iii) Observing not less than 60 lessons given by others (the criticism of the lessons observed being written down on a prescribed note-book) ;

(iv) Preparation of Schemes of work ;

(v) Administration of individual and group tests ;

(vi) Preparation of teaching aids in connection with lessons actually given ;

(vii) Black-board writing and Teachers' Drawing ;

(viii) Use of a projector, an epidiascope, a film-script, a microphone, and radio-receiving set ; and

(ix) Care and restoration of books, charts, pictures, etc.

8. *Scheme of Examination* With regard to the scheme of the examination, three questions arise :

(*a*) What should be the total marks assigned to theory ?

(*b*) What should be the total marks assigned to practice ?

(*c*) What percentage of the total marks assigned for practice should be reserved for work during the year ?

The practice of the universities varies considerably under each of these heads. I feel that the four papers in theory should carry 400 marks in all. The practice-teaching should be given an equal number of marks and these should be divided equally between the year's work and the two lessons given in the examination.

9. *Method of Practical Examination* : It is advisable that a teacher's work in the practical examination should be judged by an equal number of internal and external examiners.

10. *Standard of passing* For the standard of passing, I suggest that

(i) separate passing should be required in theory (say, at about 40 per cent) with minimum marks (say, about 30 per cent) in each paper ; and

(ii) separate passing should also be required in practical examination (say, at about 40 per cent) with minimum marks (say, about 30 per cent) in the examination lessons and the college marks.

In the foregoing paragraphs, I have discussed briefly some of the main problems connected with the B.T. course. I would feel grateful if the delegates would discuss them in the light of their experiences.

THE PROBLEM OF TERMINOLOGY IN EDUCATION

By

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At the outset, I must make it clear that I am initiating this discussion not as one who has made a special study of this problem and has, therefore, something original and concrete to contribute to its solution. I am discharging this duty at the suggestion of the organizers of this conference with the full knowledge of my limitations in this respect. I shall, therefore, try my best to put before you my views on this problem simply with a desire to start discussion and listen to your learned and well-thought-out views on this most important subject. I may also mention here that I am not conversant with the various Indian languages and therefore my observations will be more or less based upon my knowledge of the state of things existing in relation to Marathi—my mother tongue.

The Background of this Problem

This problem of scientific and technical terminology in Indian languages is linked up with the question of the preparation of suitable books dealing with the various scientific subjects in Indian languages, which again is bound up with the question of the use of Indian languages as the media of instruction in schools and colleges. The question has received a special significance and importance on account of the attainment of Independence and the adoption of the Hindi Language in the Devanagari script as the national language of India. The declaration that English will lose her privileged position within the next fifteen years and Hindi will take her place in all federal activities has given added stimulus to this problem.

English as the Medium of Instruction

The question of the medium of Instruction is as old as Macaulay's minute and since then, English has been used as

the medium of instruction on account of the special educational policy of the British Government. Though the English language as the medium of instruction had a glamour of its own in the early stage of English education, efforts were made in the twentieth century for the introduction of the Indian Languages as the media of instruction at the High School stage at least. As a result of the Montford Reforms of 1921, a favourable atmosphere was created for such efforts and by 1937 when Provincial Autonomy was introduced, it was almost accepted by all the Indian leaders and educationists that regional languages should be used as the media of instruction in the secondary stage. Mahatma Gandhi denounced the use of a foreign language as the medium of instruction in the following scathing terms :—

> " If I had the powers of a despot, I would today stop the tuition of our boys and girls through a foreign medium and require all teachers and professors on pain of dismissal to introduce the change forthwith. If this process still persisted in, it bids fair to rob the nation of its soul. The sooner educated India shakes itself free from the hypnotic spell of the foreign medium, better will it be for them and the people."

This change of medium even at the secondary stage was objected to mainly on the ground of the non-availability of suitable textbooks in the Indian languages specially in the technical subjects like Science and Mathematics. This was not, however, an insurmountable difficulty because the moment educationists and leaders of public opinion expressed themselves definitely in favour of the change of the medium at the secondary stage, writers have come forward to write textbooks in Mathematics and Science and coined their own terminology for the same, so much so, that there is now no paucity of suitable school textbooks in the regional languages like Marathi. Once it is admitted that the mother tongue is the only natural medium of instruction for all stages of education, it would be but natural to expect the same change to occur gradually with respect to the medium at the collegiate stage. This was not, however, done. The result was that students trained through the regional languages at the

secondary stage found it very difficult to follow the teaching through English at the collegiate stage.

Medium at the Collegiate stage

Things were, however, moving gradually in favour of the change and educationists began to feel the necessity of a change in the medium at the collegiate stage and attempts were being made to cross the hurdle of the want of a suitable terminology for scientific and technical subjects necessary for writing books in Indian languages individually and collectively. The Osmania University took the lead in giving higher education through the medium of Urdu with the help of books written under the direction of the Translation Bureau, by preparing the dictionary of Urdu technical terms. The success of this venture was sure to encourage other workers in the field to do the same for other Indian languages. Besides, educational institutions like the Indian Women's University, Jamia Millia, National Universities and Gurukuls had already started using Indian languages as the media of instruction. The establishment of regional universities in Bombay State has lately brought this question into prominence and though there is no specification in the Acts about the use of a particular medium, it will not be long before the regional languages are actually used as media in them at least upto the Degree stage. With regard to the medium at the post-graduate stage, there appears to be a difference of opinion as to whether the regional or the federal language should be the medium.

The main difficulty in the realisation of this ultimate objective is the lack of suitable books in these languages on the various cultural and scientific subjects which is due to the absence of any systematic and well-thought-out suitable terminologies in these languages.

Necessity of Textbooks in Indian Languages

If this state of things is to be a reality, there is the urgent need of getting books prepared in the regional languages in all the cultural and scientific subjects and as its prerequisite, of determining a suitable terminology for them. It is also necessary to have a common terminology not only in the

various Universities in India of a particular State, but also in all the Universities in India in order to facilitate exchange of teachers and migration of students to particular Institutions for specialised and advanced studies. The word Science is not to be understood in a restricted sense, but in a wider sense of knowledge which is arrived at as a result of logical thought and scientific investigation. Education is now considered as a science having its own experimental side and its own teaching technique. Efforts must, therefore, be made to fix up common terminology for education as well.

During all these years, with the idea of spreading up-to-date scientific knowledge among the common people attempts were being made individually in many places to write scientific books in Indian languages, incorporating in them the latest scientific information available in foreign languages. This type of work was started some 50 to 60 years back in Maharashtra and it received a special impetus when the Maharashtra Encyclopaedia came to be written. Similar efforts were being made in other parts of India and the most outstanding work in this direction is that of Dr. Raghu Vira who has planned the Great Eiglish-Indian Dictionary and also various smaller dictionaries of technical terms in different sciences like chemistry.

Scientific and Technical Terminology for Indian Languages

The question has received considerable thought and attention at the hands of educationists and scientists and the following alternatives are suggested for its solution :—

(*a*) All the terms should be rendered in the Indian languages, taking Sanskrit or Arabic as the basis for coining new words.

(*b*) The most important technical terms which have been a current coin internationally should be bodily accepted.

As pointed out by the University Education Commission, the first alternative would imply the establishment of societies for sciences, with committees to deal with scientific nomenclature, spelling and pronunciation and it is impossible to have the requisite number of men and the means for undertaking this work of such huge dimensions, as the number of scientific and

technical terms has been estimated to be between 20 to 30 lakhs and every year thousands of new words are being added. The second part of this alternative is also not an easy nut to crack as there has been a considerable difference of opinion concerning the main source with the help of which vocabularies should be prepared. Scholars like Pandit Amarnath Jha have expressed the necessity of having two sets of terms, one derived from Sanskrit and the other from Arabic. The latter work has been already done by the Hyderabad Government and the Osmania University and the work for the former must be immediately taken in hand. Besides, now in the present set-up of the Indian Democratic Republic and the unequivocal declaration of Hindi with the Devanagari script as the national language, the question should not be a bone of contention as Sanskrit is the basic language for almost all the northern and central languages while it has contributed considerably to the enrichment of the southern ones.

The second alternative has been supported by eminent Indians, including Pandit Jawaharlal Nehru who says as follows: —

> " We should be bold enough to lift bodily foreign and technical words which have become current coin in many parts of the world. I should like them to be adopted by all the Indian languages. An attempt to have a separate and distinguishing scientific vocabulary is to isolate and stultify our scientific growth and to put an intolerable burden on the teacher and the taught alike. Many foreign words can and should thus be taken, but many technical words will have to be taken from our own languages also."

In 1944 the Central Advisory Board of Education approved the following recommendations of the Committee composed of eminent scientists and literary men, specially set up for the purpose and they were also accepted by a conference of Vice-Chancellors in 1948: —

(1) that for the development of scientific studies in India it is desirable to adopt a common terminology; and

(2) that in order to maintain the necessary contact between scientific development in India and similar developments

> in other countries, the scientific terminology for India should consist of (a) an international terminology in its English form, which will be employable throughout India; and (*b*) terms borrowed or adapted from Indian Languages.

The University Education commission of 1949 has discussed this question from all points of view and suggested the following solution of this problem :—

> " The practical solution of this problem lies in adopting International or English technical and scientific terminology. We do not, however, recommend that borrowing should be done indiscriminately. We are aware that (1) there are terms which are strictly technical, i.e. they have just one meaning, e.g. Hydrogen Peroxide; (2) there are others which are quasitechnical, i.e. they have other uses besides the strictly scientific ones like heat, light etc.; (3) again in social sciences like economics, politics, ethics, Indian languages have a number of terms of their own and in philosophy there is a rich vocabulary in Sanskrit. It is not necessary or desirable that words should be borrowed for all these from outside."

Above all, it is essential that the borrowed words should be properly assimilated, their pronunciation should be adapted to the phonetic system of the Indian Languages and their spelling fixed in accordance with the sound symbols of Indian scripts.

The Central Advisory Board of Education in its special session held in April 1950 has approved the Commission's recommendation that a Board consisting of Scientists and Linguists be appointed to prepare a scientific vocabulary of words which will be common to all Indian Languages and also arrange for the preparation of books in different sciences to be rendered into all Indian languages.

The above views of the University Education Commission will make it clear, that even though there may be a difference of opinion as regards the methods to be followed for preparing terminology of purely scientific and technical subjects, there need not be any difference of opinion as regards the basis for

the formation of a common terminology for educational subjects.

Available data on Social Sciences Terminology

If we take stock of what has been done so far with respect to such a type of terminology in the Bombay State we shall be struck by the work of Prof. D. D. Wadekar of Poona who has published an exhaustive list of psychological terminology with Sanskrit as its basis.

As the modern science of education is mainly based on psychological principles, this work of Prof. Wadekar will be a very good starting point for educational terminology as it has received the approval of eminent educationists and scholars from all parts of India.

A number of writers on education have published books on psychology and science of education in Marathi especially for the use of students in the primary Training Colleges, who are taught all the subjects of the theory of Education through Marathi and they have coined their own terminology for their books in the absence of any commonly accepted and authoritative vocabulary. It may also not be long before the regional languages are used as media of instruction in secondary Training Colleges. There is, therefore, a very urgent necessity and a strong case for attempting to evolve a common terminology for educational subjects.

In the absence of a definite connotation for specific terms, the following type of confusion is likely to occur.

If we look to the various books on educational Psychology written in Marathi, a sort of confusion and indecision regarding the exact connotation of specific terms will be easily noticed. The various stages of human growth have been represented by different terms by five different writers as follows : —

(1) शैशव upto 5 years, बाल्य upto 12, कौमार्य upto 18, तारुण्य beyond 18.

(2) बाल्य upto 5 years, शिशुत्व upto 8, कौमार्य upto 12, तारुण्य after 12.

(3) शिशुत्व from 6 to 12 years, पौगण्ड upto 18 & तारुण्य upto 24.

(4) बाल्य upto 5 years, कौमार्य upto 11, पौगण्डावस्था upto 18 & प्रौढता after 18.

(5) शैशव upto 5 years, बाल्य upto 10, किशोरावस्था upto 13, कौमार्या-वस्था upto 18, तारुण्य after 18.

This will show that one of the terms कौमार्य has been used for varying periods of 13 to 18, 9 to 12, 6 to 11 and 14 to 18.

This will clearly demonstrate how difficult and urgent this question of having a common terminology is in the face of such confusion. A number of such instances can be given, e.g. 'sentiment' has been translated by भावना, भाव, स्थिरवृत्ति, उच्चभावना, 'Will' has been rendered by निश्चयशक्ति, इच्छाशक्ति, प्रेरकशक्ति, 'Perception' by प्रज्ञा, अवबोध, वस्तुबोधन, संवेदन, 'Emotion' by भावना, मनोविकार, विकारभावना, चित्तविकार.

Necessity of a common terminology for Educational subjects

It will be sufficiently clear from the above that there is a very great necessity of evolving common terminology for educational subjects. The point to be decided next will be the decision about the language that should be resorted to for getting the necessary terminology. The first and best source will be the Sanskrit Language. Sanskrit roots are capable of adapting themselves to express different shades of meaning by the use of उपसर्गs or prefixes and प्रत्ययs or suffixes. If we take such a common root like कृ, we can have more than a dozen different senses from it by the use of prefixes, e.g. अपकार, उपकार, आकार, अंगीकार, अधिकार, तिरस्कार, निकार, प्रकार, प्रतिकार, विकार, विप्रतिकार, संस्कार, and more than half a dozen derivaives by suffixes, e.g. कृति, कर, करण, कार्य, कृत्य, कर्तव्य, करणीय. Thus it will be seen that it will be possible to express different shades of meaning with the help of Sanskrit. There is another peculiarity of the Sanskrit Language by which different words can be joined in compounds and suitable, handy combinations of words can be formed to express combination of ideas.

Besides, all the Indian languages are either संस्कृतोद्भव, or संस्कृताश्रयी and therefore one can say that Sanskrit has been already enjoying a status of inter-State acceptance. This specially favourable position has been accepted by great Indian scholars and educationists.

The terminologist has a triple task of " adoption, adaptation and coinage ". He must adopt those words which have already become current coin and stood the test of conveying the particular sense. He must adapt those which are capable of giving the required sense with a little change and in the absence of the above two types, he must coin new ones. Sanskrit is the best source for getting all such necessary words, being the only universal basic language for all the Indian languages which have been continually replenished with its तत्सम and तद्भव words and have been made real and effective regional distributors of knowledge among the masses. While preparing the terminology on the basis of Sanskrit it will be, however, necessary to give alternate words wherever necessary because some Sanskrit words are used in different connotations in different parts of India, e.g. ताप means heat in Hindi while in Marathi it generally means fever. संशोधन in Hindi means correction or amendment while in Marathi it means research. It is very urgent, therefore, that before the terminology already formulated in the various provinces in respect of educational subjects gets firm-rooted, an effort must be made to pool up the attempts made so far and arrive at the most appropriate words by a process of sifting and close scrutiny at the hands of linguists and subject-specialists and it is a conference like this that can take a lead in this matter.

Points for consideration

The foregoing survey has clearly brought out the following points for our consideration.

(1) English is not expected to remain for long as the medium of instruction at the collegiate stage.

(2) Either the regional or the federal language will be made the medium The regional language at the degree stage and regional or federal language at the Post-graduate stage.

(3) During the period of transition, efforts must be made for evolving a uniform terminology for cultural and scientific subjects by an all-India organization like the Inter-University Board or the Central Advisory Board of Education.

(4) Textbooks must be got written in all Indian languages by the various universities of each linguistic group.

(5) There is a necessity of evolving a common terminology for education on an all-India basis by a body like the proposed Indian Council of Teacher-Education by appointing a Committee for that work to help the work of the central body referred to in (3) above.

Suggestions for the fixation of Terminology in Education

I have almost done and before closing my remarks I should like to suggest the following lines of procedure for the guidance of the Committee that may be appointed for working out a common terminology for Educational subjects :—

(1) Lists of all the technical and scientific terms in the English Textbooks on Education should be prepared under the following or similar heads :—

(*a*) Educational and Experimental Psychology.
(*b*) Philosophy of Education.
(*c*) General and special methods in various subjects.
(*d*) History and Administration of Education.
(*e*) History of Educational Thought.
(*f*) School Organisation and Hygiene.

(2) They should be sent round to the various Universities for supplying the Indian language equivalents already in use at the Universities or employed by writers of books on education in that linguistic region or those coined anew.

(3) Each linguistic University should appoint a small committee to carry out the work mentioned in (2) above.

(4) The responses received from the Universities should be consolidated for the consideration of the Committee of Educational and Linguistic experts ; and

(5) Attempts should be made to finalize the terminology for general acceptance by presenting it to a conference like the present.

I have tried to give my views on this important subject as clearly as I could and I shall feel myself amply rewarded if this expression of my views leads to some concrete work in the proposed direction.

THE PROBLEM OF TEACHING IN INDIA

By

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The professional preparation of teachers is one of the most important social problems which a country is called upon to solve. If our schools are to produce young men and women who possess certain clear-cut ideals, and who have acquired certain desirable abilities and attitudes, our teachers must possess vision and faith in the possibilities of their work and must be equipped not only with scholarship, but with the art of 'educating' their pupils. If their pupils are to possess the ability independently and honestly to attack the problems with which the complexity of modern life will confront them soon after leaving the school or the University, they must themselves receive an education that will guarantee the possession of these powers and attitudes. It is impossible to maintain today that the teachers who receive training at the Training Colleges in various parts of this country possess those abilities and ideals that we want to develop in the men and women of tomorrow.

The ideal before the Indian teacher has so far been that of *craftsmanship.* Many stay at the level of artisans and poor artisans at that, some become skilled craftsmen. If education is to become 'an instrument of social and national welfare', it must be raised above the level of a craft to the higher level of a profession. Training for the profession must involve 'the mastery not of rules but of principles'; it must give us courageous and honest practitioners of the profession who can analyse the social forces, understand and assess the worth of social demands, and introduce the necessary degree of variety and adaptation in the educational programmes of the country. In short India does not need merely classroom teachers but educational thinkers and educators.

This is a high ideal, a difficult ideal, but an ideal whose challenge all self-respecting educators must accept because of

its far-reaching possibilities for the future of the country and of the world. The schoolmaster must emerge from his cloistered seclusion; he must establish fruitful contacts with the people, and must understand, exploit and develop 'the intellectual, moral and aesthetic values' inherent in the environment.

It is not possible, within the compass of this paper, to discuss all the aspects of the problem of teacher training in India at different levels. I propose to confine myself to the training of teachers for the high schools situated in urban areas which also run primary and middle sections, and which normally have on their teaching staffs trained graduate teachers. This problem can be considered under the following broad heads: (1) Education at the undergraduate level, and (2) Education at the post-graduate stage.

Education of teachers at the undergraduate level In connection with education at this stage one is confronted with a number of questions: (1) At what stage is the choice of the teaching profession to be made? After passing the high school examination? Or the Intermediate Examination? What should be the range of education during the years spent at the University before graduation? Who are likely to make better teachers, students who work for a Pass Degree or those who qualify for an Honours Degree? Should we continue to provide for our future teachers the usual university courses during the period of pre-professional training or courses drawn up with special reference to the needs of school education, namely 'professionalised' courses? Should we insist upon special subjects? and so on.

All my colleagues and fellow-workers who are engaged in the professional preparation of teachers in India will, I hope, agree with me that most of the graduates who join the Indian Training Colleges and Departments possess such a poor background of liberal education and are intellectually so helpless that they cannot profit adequately by the facilities for education which post-graduate Teacher-Training Departments offer. A few of them are undoubtedly scholars in their special fields, but most of them possess an unsatisfactory smattering of the

soft optionals they offered, and in which they qualified, for their degrees. The post-graduate Teacher-Training Departments cannot go behind their degrees and cannot undertake to deepen and broaden their knowledge of the subjects which they will be required to teach in schools. If, therefore, they are to profit by their professional education at the post-graduate level, they must receive an education at the under-graduate level that will guarantee their profiting in the fullest measure by the professional education which they receive in post-graduate teacher-training classes.

If the choice of the career of teaching is to be made after matriculation, and before they join the 1st Year Arts or Science classes, there must be some machinery for determining their future fitness for teaching. Satisfactory records of their performance in various fields of school activity must be available for examination by the authority responsible for selection, and tests of intelligence, aptitude and personality traits may be given. It is possible to reject at this stage those who are physically and intellectually unpromising and do not possess the necessary physical, social and intellectual qualities that go towards the making of a successful educator, e.g. low intelligence, emotional instability, a poor voice, lack of energy, etc.

The next important problem is the determination of the special curricula for prospective teachers at the Intermediate Colleges and Universities. The courses that students can offer at present for the Intermediate and Degree Examinations *aim at scholarship* and have been drawn up *without any reference to the needs of schools.* The problem of the provision of courses in various subjects specially drawn up for future teachers bristles with difficulties, administrative and other, but these difficulties should not prove insurmountable and must be overcome if we are to prevent the tragic waste in school education which is in turn responsible for supplying the Universities and Intermediate Colleges themselves with inferior material. It should be possible to provide courses that would give the prospective teacher a *deeper* and *broader* understanding of the content and *meaning* of the subjects which he will be required to teach in schools. He must have a correct appreciation of

the educative value of each subject, of its vital relationships with other subjects, of its meaning and significance in and for the environment from which his future pupils will be drawn. His *starting-point* will be the *interests* of the child and he must learn to organise the educative material in such a way that these interests may grow and develop into worthy social purposes. Mere acquisition of information should be discouraged, and the teacher in the making should be acquainted with ' activity ' methods, and trained in the study of the materials offered by the environment. Special courses can be prepared in sociology which may enable him to understand different forms and functions of social organization, of the place of the various educative agencies in society and their influence upon the growing individual. The sociological approach can be attempted in all subjects. The variety of his experience can be extended through participation in a rich programme of extra-curricular and communal activities.

If during these formative years at the University the possibilities inherent in different environments are studied and analysed, if class lectures are supplemented by work in special study rooms and subject laboratories, if stress is laid upon the cultivation of initiative and independence, if the student is enabled *not merely to acquire knowledge, but to see how knowledge has been developed*, he will achieve, slowly but surely, the ability *to develop the materials* of instruction and will no longer depend on books alone for information.

Some Teacher-Training Departments in Europe and America have been experimenting with courses designed to give the future teachers an extensive background of general education and to relate their studies to the local environment. Here are some examples of the courses provided in America and Europe :—

History :

(1) Contributions of the Ancient and Modern Worlds to Modern Civilization.

(2) Expansion of European Civilization in Modern Times.

Science and Biology :

(1) Introduction to Science.

(2) Local Plant and Animal Biology.

Geography :

(1) Local Geography.

(2) Local Ethnology.

Philosophy

(1) Introduction to Philosophy.

(2) Introduction to the Study of the Elements of Religion.

Literature :

(1) An Outline of Literature.

(2) Study and Evaluation of Children's Literature.

Sociology

(1) History of Civilization.

(2) General Sociology.

(3) Educational Sociology.

Extras :

(1) Phonetics and Oral Expression.

(2) Penmanship and Black-Board writing.

(3) Written Composition.

(4) Art.

(5) Educational Handwork.

Some of these subjects could be offered as optionals for the Intermediate, others as optionals for the B.A. Examination by those who wish to go in for teaching after graduation. For instance, History of Civilization could be one of the papers in History, the other papers could be Indian Constitution and Social History. Local Geography and an Introduction to Science could be offered as parts of the Intermediate Courses in Geography and Science respectively. Local Plant and Animal Biology could be permitted as one of the electives for the B.Sc. in Biology. An introduction to Philosophy or an introduction to the study of the Elements of Religion could be

offered by those studying Philosophy. In Literature, an outline of Literature would give the students a general idea of world literature, and the study and evaluation of children's literature will familiarise them with the existing children's literature.

Besides these courses which could take the place of some of the existing courses for the Intermediate and B.A. Examinations, students could be required to cover, during the period of three or four years preceding the B.A. Examinations, the whole group of extras required of them in Training Colleges, e.g. art, educational handwork, black-board writing, speech training, etc. and could thus acquire some of the necessary skills for their future profession. These courses will not only not diminish the value of the education offered at present at the Intermediate and Degree levels, they will definitely increase its value as liberal education, and will make training programmes in post-graduate colleges and departments less crowded and therefore more effective.

Besides the provision of these courses, prospective teachers can be initiated, during the pre-training stage, into their professional work by being required to observe and attend school lessons, to conduct certain educational experiments, e.g. literacy campaigns in the local region and other areas, and to discuss problems with individual teachers and in conferences. All this work which will not prove burdensome because it will be spread over three or four years will give the students the right orientation towards their profession.

Admission to Training Colleges and Departments of Education: After graduation from the University, students will have qualified for admission to post-graduate Teacher-Training Departments. The possession of a degree in certain subjects and the certificate of having covered certain supplementary and optional courses could not, however, *ipso facto* entitle them to admission. There should be *rigorous selection again at this stage.* The school and college record should be carefully gone through, a certificate of health demanded, and a guarantee to work as teachers required in the event of selection. The pressure on the Indian Training Colleges is too

great and if the number of applicants for admission to a Training College is too large, it may be necessary to make a preliminary selection on the basis of school and college records of scholarship and character and to eliminate the obviously unfit. Those who satisfy the *preliminary selection criteria* should be tested further with a view to their suitability for the teaching profession. This *test* should be of a fairly comprehensive character and should be both oral and written. It should comprise intelligence tests, achievement tests, tests of comprehension in English and the mother-tongue, tests of the power of expression, oral and written, penmanship, blackboard writing, handwork, spelling and drawing. I would even advocate tests of sense of humour which were actually tried by me at Aligarh and were found to afford a positive prognosis of success as a teacher. The personal traits of the teacher could be assessed through interview. It will be a laborious business, but it will be worth all the time and trouble given to it.

Curricula and general organisation of work The next problem to which we have to address ourselves is that of curricula and the general organisation of work in the Teacher-Training Departments.

Until now the Teacher-Training Departments in India have been following the wrong practice of merely superimposing professional courses on liberal education received by their alumni at the University. I have already emphasized the need of the professionalization of subject-matter at the pre-Training College stage through the adaptation of existing Intermediate and Degree courses and the provision of supplementary courses. The process of the integration of professional techniques with courses in the subjects of school instruction can be carried further in the Training Departments.

The professional courses at present comprise the following divisions : (1) Courses in theory, e.g. Principles and Psychology of Education, History of Education, General Principles of Method, and Methods of Teaching school subjects, School Organisation and Hygiene. (2) Observation of Teaching and Practice Teaching. (3) Supplementary Training in Phonetics,

Educational Handwork, Drawing and Sketching, and Physical Education.

Tutorial work should be an integral part of the work in theory and it should comprise not only the correction of essays but also the discussion of educational problems. There has been a healthy shift of emphasis in several Departments of Education in India from the study of old educators to the study of present-day educational movements in India and abroad.

Practice Teaching : From the administrative point of view the most difficult part of the course is practice teaching.

The programme of practice teaching should begin with organised observation by the teachers-in-training of the lessons delivered in different subjects by trained teachers on the staffs of the practising schools and by Training College Lecturers. As a rule many trained teachers on the staff of these practising schools relapse into traditional methods after graduation from Training Colleges and Departments, very few bring to bear upon the preparation of their work the care and thought necessary for good lessons. The demonstration lessons given by the junior members of the Training College staff, especially by those who have had no previous experience as schoolmasters, are seldom above criticism. Much of the demonstration work, therefore, tends to be sterile.

This stage is followed by induction of teachers-in-training into teaching. If this teaching is to be fruitful, the plan and details of every lesson delivered at the earliest stage, at least, should be previously discussed with the supervisor, it should be supervised for a whole period, and its merits and demerits discussed after it has been discussed. This ideal arrangement presupposes the existence of an adequate staff of Training College supervisors and first class trained teachers, a condition seldom fulfilled. The work, therefore, tends to become perfunctory and casual, and the progress made by the teachers-in-training is seldom satisfactory. Training college staffs have to choose between working strenuously overtime, and scamping their work, and the latter alternative is the one generally

chosen. The larger the number of lesson periods to be supervised, the more slipshod does the work become.

To add to the difficulties of the Training College staffs and students, many headmasters and teachers in the practising schools are obsessed by the desire to finish the courses and if they are to be obeyed and humoured by teachers-in-training, quality must needs be sacrificed to quantity. These drawbacks can be overcome only if Training Departments have generous cadres and the schools are staffed with first-class trained graduates and special 'critic' teachers. Some Training Colleges, that have Government High Schools attached to them as practising schools and whose principals have a hand in the appointments, promotions, and transfers of the teachers on the staffs of practising schools, can manage to have a first-class practising school staff by transferring from the practising school teachers who show signs of degenerating and by appointing in their place first-class trained graduates fresh from the Training college and possessing enthusiasm and energy.

Practice in schools should not be confined merely to teaching, but should include the criticism and assessment of school time-tables, buildings, staffs, and hostel arrangements. It should also include class discussions of lessons taught and visits to all sorts of educational institutions.

Examinations: It is necessary to test the progress of the teachers-in-training in theory and in the art of teaching both in the course of the session and at the end of the session. The regularity of their progress will be ensured partly by carefully drawn-up programmes of work and by regularly maintained records of work. Periodical tests, written, oral and practical, are necessary. The scope of the professional examinations prescribed for graduates in India needs to be enlarged, and their methods modified so that they may become more effective and reliable tests of general education and professional ability. In my opinion in addition to the written tests and practical examination, oral tests are also desirable. If they are well designed they supplement the written examination in a valuable manner and enable the examiner to arrive at

a more reliable assessment of the examinees' grasp of educational principles, and of his ability to understand and discuss educational problems. Students whose records of work during the session are unsatisfactory should be excluded from the final examination.

The examination should be remodelled so that it may test not the prospective teachers' power of reproducing the prescribed texts or lecture notes but the ability to judge and apply their knowledge to pupils of different age-ranges and adapt it to different local conditions.

Final practical examinations are largely a farce. The external examiners observe for a few minutes the conduct of a lesson and place the examinees in 1st, 2nd, and 3rd classes. Although the head of the Teacher-Training Institution is generally a co-examiner and has some voice in the determination of results, the practical examination of teachers-in-training is a very unreal test. In some universities it is possible for the teachers to choose and prepare the topics of their lessons months and weeks in advance of the examination, to obtain help and to prepare material for the examination and finally to deliver a flashy lesson which very often gets them a very good class, although their actual teaching ability may be hardly second class. If examining bodies make up their minds about the payment of travelling allowances to external examiners more than once and they can in the majority of cases easily pay these allowances out of the examination fees they collect the external examiner can make a surprise inspection of the teaching of individual teachers once or twice in the course of the session and can make provisional assessment of the teaching ability of individuals which can be confirmed or modified at the final examination.

It is important also to hold examinations in educational handwork, physical education and phonetics and incorporate the awards into the final examination result.

Relapse of trained teachers into traditional methods of teaching : It is unfortunately a fact that after having qualified for a Degree or Diploma in teaching, teachers show a tendency to relapse into traditional methods. This is due partly to the low status and unattractive remuneration offered to teachers

in India, partly to lack of encouragement by heads of institutions and colleagues to try the new methods, partly to unsatisfactory inspection and supervision by the officers of Education Departments. I would suggest the following remedies :

(1) The Final Examination for a Diploma or Degree in Education should be a qualifying examination and should confer no claim to appointment. The appointment should be, in the first instance, temporary, and appointment to permanent posts should be won as a result of hard work after some years of active employment. A second professional examination, strictly competitive, can be used for recruitment of teachers to permanent posts. Candidates should be required to submit, along with their applications for entry, the results of their first examination and an attested record of their professional career and further study, e.g. educational experiments performed, articles, papers and books written, conferences attended, and social welfare work done.

(2) The final examination should be a test of teaching ability, ability to administer and organise work in educational institutions, ability to evaluate text books, programmes of work, familiarity with recent children's literature, and ability to discuss educational problems, local and other. The work actually done by the teacher during the probationary period should also be assessed, e.g. the programmes and plans prepared by him, the exercises corrected by him and records kept by him.

(3) Grade promotions should depend upon evidence of continued professional interest and growing skill and ability. In some European countries appointment to higher post depends upon the passing of competitive examinations each time the candidate desires a lift. This can be effective only if examinations are a real test of growing professional ability. But we need not make a fetish of examinations. It is possible to evolve a system of inspection that will enable reliable records of the work of individual teachers to be kept. These records must be comprehensive and must contain not only the results of the periodical assessment by the inspecting officers and heads of schools, but also particulars of their participation in study groups, educational experiments, summer courses, educational exhibitions and demonstrations, and study tours in the country

and abroad. In America rating scales of efficiency are used, but they are still in the experimental stage.

(4) The continued improvement of professional ability depends partly upon the inner urge experienced by the teachers themselves to continue their professional growth, partly upon the external devices and agencies, e.g. supervision by heads and by inspectors. The inner urge to continue professional improvement implies the existence in every teacher of a genuine interest in his professional work, and this is impossible if the teacher has adopted teaching as his last resort and is dissatisfied with his social status or with the emoluments offered him. If education is to be a genuine career for the young men and women best fitted for it, the salaries and social status offered them must be commensurate with the importance and seriousness of the work required of them. If they are offered security of tenure and better social status, they will be less pre-occupied with their economic condition and will devote themselves whole-heartedly to the fundamental problems of their profession. In western countries the lot of the teacher is much better than in India and it is consequently possible to attract brilliant persons to the profession. Teachers receive allowances for disability and superannuation, family allowances depending upon the number of children in the family, travelling allowances on transfer, maternity leave, railway concessions, free tuition for their children and for themselves if they study at a university, and financial aid in serious cases of need. Provision is also made for widows and children of deceased teachers.

If the country realises the importance of the function of education as an agency of social reconstruction, it should make up its mind about improving the conditions of this important service. But until society awakens to a realisation of the fact, teachers should not sit idle and should make up their minds about convincing society of the great possibilities of their work. Both society and teachers have been apathetic so far. Society has a poor opinion of teachers and teachers carry a grouse against the shabby treatment they receive. If the vicious circle is to be broken, both society and teachers must awaken to a realisation of the grave consequences of the neglect of this vital agency of social reconstruction.

RESEARCH IN EDUCATION

By

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It augurs well for the future of Indian Education that in the very year of the Declaration of Independence, the First Conference of Training Colleges should have been organised under the auspices of the University of Baroda. I am sure I am voicing the feelings of all the delegates gathered here when I say that we are profoundly grateful to the enlightened lady Vice-Chancellor of this University, the first lady to occupy this position of eminence and distinction in the history of University Education in India. (And I may add that the organiser of this Conference is also a lady educationist.) Well, let us with such a fair and happy start go ahead and inaugurate a new era of creative research in Indian Education.

When I view the more or less stereotyped courses of Training Colleges all over the country, I feel very depressed indeed. The stimulus for research is not there. Even psychology, I mean psychology of the right type, is conspicuous by its absence from these courses. And as the Masters and Doctors Degrees in Education were unknown in our country till the other day, a dead end was reached by our teachers under training at the completion of their training course. This situation must change, and change at once. Research in education should become the concern of every teacher in our country.

There are two very special reasons why first priority should be given to research in education in our country. In the first place the teaching profession is under a peculiar kind of thraldom even in Free India. The professional teacher is being dictated to and held under servitude as it were, by those outside the profession. It is my belief that " emancipation of the teacher will depend more upon his originality, insight and expertness than upon any other factor. And nothing would so effectively obtain for the teacher that expertness and the reputation for having it as his ability to conduct research in his field " and to produce tangible results. In the second place

let me draw attention to the signifiance of the events taking place around us. A new era is upon us. It can usher in the much longed for millennium of peace and plenty, or it can equally well involve us in a whirlpool of chaos and confusion heading to complete ruin of human civilisation. The ultimate result will depend on how far we, of the present, are able to control and direct the mighty current of social revolution that is coming rolling on. In our country in particular, the current may be controlled and canalised into fruitful channels only through drastic changes in our social structure. The social problem is then the most challenging and the most urgent problem. This, of course, is readily admitted by thoughtful men and women in our land, but what is not so readily admitted, nay not even seen by them is that " in the last resort the problem of society is the problem of education. All our social disorders may be traced back to lack of right education ". While it is true that the function of education is to reflect the social order, it is also true, I should say to a greater degree, that education conditions the development of society. To inaugurate a new social era we must begin with a drastic change in our educational system. And such a change can be initiated only through systematic highlevel research in education.

The pressing need for research in the higher branches of learning has been stressed by the Radhakrishnan Commission. The report of the Commission rightly points out that " the advancement of knowledge is a necessary condition of the continued validity of teaching, for unless a study is rooted in research it will die.... In India research has become a practical necessity for the continued growth of our national life. .". These remarks of the Commission apply with double force to the field of education, and research in education is most certainly a practical necessity for the continued progressive growth of our social as well as our national life.

I

Problems for Research—An Order of Priority

(a) *The Philosophical Problem—Aim of Indian National Education* The need for research in education may no

longer be disputed by those who have the welfare of our free country at heart. Having conceded the need, we should turn our attention to the order of priority to be given to the problems confronting us in the field of Indian Education. As I take a glance at the excellent summary of educational research in our country published in the Indian Journal of Educational Research I find evidence of very great enthusiasm for adventure in education, which of course, is welcome, but there is little or no planning. There is discernible in these research endeavours a certain restlessness and a striving after an undefined goal. This perhaps is inevitable in a country recently freed from foreign yoke trying to establish a true democracy untainted by tendencies towards dragooning and regimentation. But the phenomenon is also symptomatic of intellectual lethargy, and of a subconscious resistance to rethink the objectives of Indian Education in the light of the new set-up in the country. This resistance must be broken down at once, and the objectives of Indian Education have to be formulated in unambiguous terms.

Of late there has been a good deal of loose talk about a national system of education for our country. The terms in which the aims of such education are couched are applicable to all countries on the face of the earth. There is nothing characteristically INDIAN about them. Let me cite an example in support of my position. The aims of National Education as set forth by the National Educational Planning Committee of the All-India Federation of Educational Associations are, (1) the harmonious development of all the faculties of students, (2) training of young men in duties of citizenship, (3) development of national wealth, (4) preservation and evolution of national culture, and (5) promotion of higher studies and research. I should like to know what is specifically Indian in this list of aims. Perhaps there is some remote suggestion in the fourth aim which speaks of the preservation and evolution of national culture. This suggestion has to be developed, and the lines along which such development may be attempted are indicated for us in a recent brochure *A New Order in English Education* (University of London Press, 1946). "A national system of education," says H. C. Dent, the author of

the little book, " has two vital functions to perform—a tradition preserving function and a growth facilitating function. In a time of social flux both these functions become overwhelmingly important. They decide the future. It is imperative today that those elements in our tradition—and they are many —which are worthy of preservation shall be preserved and handed on. That is essentially the task of education. It is equally—and some would say more—imperative that we as a people " shall shake off the medieval mind and reorient ourselves in the rapidly changing world. In that task education must play a vital part."

A national system of education, then, has to salvage the elements of abiding value in the past and recondition them to the present. Our ancients had an amazing amount of insight into the true nature of man and of his ultimate destiny. " Our culture and our spiritual heritage have a message of peace for the bewildered world today. These have to be re-discovered, and adapted and re-fashioned by a process of creative synthesis into a structure which will be suited to the present needs and will be responsive to the dynamic and rapidly changing world of today." Mere revivalism may serve but to strengthen reactionary medievalism, whereas revitalising the enduring elements in the past is bound to open up the gates for progressive national advance.

Indian National Education, then, should first dig up and excavate the foundations of our basic spiritual culture to seize upon the abiding elements in it, and then erect an imposing structure to suit modern conditions making use of these elements. But *THE* question remains, ' What are the abiding elements in our culture ? ' This question is of supreme importance in the present crisis, but the answer to it is nowhere to be found. I look for the answer in vain in the numerous research projects at present under way in our universities. The answer must be found, and found at once if we are to survive as a nation. And the answer cannot be found by the politician or the administrator. The only person competent to discover the right answer is the advanced research worker in education. I should like to give first priority to the supremely important philosophical problem of formulating the aims of

Indian National Education at the present critical stage, and commend it to the advanced research workers for immediate attention.

(b) (i) *The Sociological Problem* : Let me press it with all the emphasis at my command that research workers at the higher levels both at the Universities and advanced institutes of Education in our country should take up the great problem of formulating the aims of Indian National Education in a manner that will preserve and revitalise our peculiarly spiritual heritage.

Next only in importance to the philosophical problem mentioned above and in a sense closely allied to it are the sociological problems of the impact of education on society, and of social structure on education. Let me admit at once that Educational Sociology is of very recent origin. It is only in very recent years that efforts were made to inaugurate a systematic study of Comparative Education. But many of these attempts have failed to bring out the points at issue in comparative studies of Education. They have tended to degenerate into chronological statements of policy and administrative structures of educational systems in different countries. Of the emergence of education as a significant and potent product of the social dynamism of the nation or country concerned, and of the vital directing and moulding influence which education exercises over society we learn nothing from these studies of so called ' Comparative Education '. This is perhaps due to the fact that historical studies generally as such lack the social perspective, and research workers in educational sociology have been influenced by the wrong lead given by historians. A very healthy corrective to this misleading trend is to be found in Butt's Cultural History of Education. The sooner we place Comparative Education on right foundations the better will it be for research workers in educational sociology.

Education, let us remember, is a social and socialising process. It is, no doubt, the product of and reflects the social order in which it functions. But its function cannot be restricted to this subordinate role. Whether we will or no, the educational system of a country also conditions the necessity

of development of society. The extent to which education determines the social order and may be used for changing the social order has not been fully appreciated. In our country and at this critical moment it is imperative that we make a deep and penetrating study into the sociological foundation and functions of Indian Education. There is a deadening stratification in our social structure. What is the extent to which this stratification has moulded our educational system down the ages ? And what is the extent to which our educational systems have contributed to the perpetuation of this soul-killing stratification ? These are novel problems for the research worker, and he can throw much light on the issues involved if he will compare the Indian with the foreign scene. In the West too we have social stratifications though of a different complexion. And it is of the utmost urgency that we study the interaction between social structure and the prevailing educational systems with a view to removing social disabilities and unifying social structure. Only so may social frustration be removed and social tensions eased, and the under-priviledged be rescued from the clutches of the communistic terror which is encircling us.

I am so fully convinced of the immediate need for and value of this Sociological Research in Education that I wish to dwell on it a little longer. Education is man's conscious reaction to the challenge of the flux of time. But education is functioning, specially in our country, listlessly and apart from the real currents of life. Current educational thought and practice have failed to help men adjust themselves to the rapidly changing scene around them. Under these conditions the sociological study of the interaction between education and social evolution assumes great significance for those who wish to plan for the education of our youth. Such a study correlates education with the nature of group life and shows how educational thought and practice prevailing at various historical and cultural epochs are inter-locked with social institutions. It is true that the cultural setting of various historical periods have influenced education, but at the same time education has also influenced the growth of culture. We have, therefore, to study the cultural setting of education and also the role of

education in culture. In other words, we have to study the two-way traffic between education and the historico-socio-cultural climate of a given epoch. This study has been carried out for western conditions by Professor Freeman Butts in his 'Cultural History of Education'. Research students in Indian Education have to take up at once a similar study for our country. Educational Planning will be pointless unless it is based on the findings of the sociological research outlined above.

(b) (ii) *Educational Surveys*: As a major auxiliary to research in educational sociology, I wish to recommend Educational Surveys. We have become familiar with the concept of survey in certain branches of science and the humanities, such as Geology, Zoology, Botany, Geography, and Economics. In Education the concept is new and has to be given a different orientation. Fact-finding should be there, but a mere factual descriptive survey without interpretation and evaluation in terms of the social dynamism of the survey area is without any value in education. The statistical data and the historical material gathered by the research worker have to be integrated with the social background and the complex cultural pattern presented in its totality with education as its living centre. And the aim of all these research studies should be to indicate the lines along which Indian Education should be re-oriented in the present crisis.

(c) *The Psychological Problems*: From ends we now turn to means. Philosophical research having formulated the aims of Indian Education and Sociological Research having indicated the lines along which our educational system should be reorganised with its solid foundations in the enduring elements of our past, we have now to devise methods by which our educational plans may be carried out. It is here that research in Educational Psychology comes in. It is in this field that some original work, though unsystematic and unco-ordinated, has already been done at different educational centres in our country. We have now to undertake the co-ordination of the work done and yet to be done in this field. Let me suggest a scheme for such co-ordination.

It should be remembered that the central theme in Educational Psychology is the Learning Process. This process implies (1) the psychological nature of the Learner, (2) the environment in which he learns, (3) the content of his learning, and (4) the agencies for aiding and guiding and assessing his learning. It will now be seen that all the research problems in Educational Psychology are comprised under the headings enumerated above. All the numerous and varied problems of research in Educational Psychology will get harmonised and integrated if the Learner in the Learning Situation be made the centre of the research stage. With this orienting concept as our guide let us list here some of the outstanding problems for investigation by our research scholars. Under the first head of 'the Psychological Nature of the Learner' we have to mention the educable capacity of the Indian child, his normalcy or otherwise. The norms for our children are bound to be different from those for the young ones in foreign lands as our social and cultural climate is unique. Education does not function in a vacuum. It is determined by and in its turn determines the social environment. It is entirely fallacious, therefore, to accept the norms drawn from foreign studies. Hasty improvisations based on foreign models will lead to confusion. What we need at once is a reliable tool for the survey of National Intelligence of the school-going population in our country, and of adults also, if possible. The forging of such a tool is a stupendous task, but it must be accomplished by the Educational Psychologist. The absence of a scale for measuring general intelligence is keenly felt by all of us. I can speak from bitter experience in this field. Every significant problem in Experimental Education taken up by my students in the post-graduate and research classes is being held up for want of a reliable intelligence scale. The psychologists having failed us in this important matter, let us take up the Herculean task ourselves, and complete it. We shall be soon discussing plans for creating a country organisation of Training Colleges. Since the construction of a National Intelligence scale will demand the co-operative endeavour of all research workers in every state in the country, the Indian Council of Teacher Education should mobilise all its resources for accomplishing this task.

Alongside the General Intelligence Tests, both verbal and non-verbal, we should take up achievement tests in all the school subjects. Here, of course, there will be wide variation from State to State. Within the limits imposed by the language and curricula of the States, the work of constructing and standardising these scholastic tests must be taken up and completed speedily. Without the aid of these tests several pressing problems in Indian Education will remain unsolved.

Apart from the tests of General Intelligence and of achievement, we have to forge other psychological tools for the assessment of individual differences among children. Tests of Aptitudes, of Interests and of Personality suited to our conditions have to be constructed and standardised. Psychological studies have also to be made of differences due to sex, age and the home and school environment of children. The differences are of great importance in the field of education. Let me refer to one very restricted region of this type of study, namely, differences of image-type and their bearing on modes of learning in children. It is seen at once how profoundly significant these individual differences become in the class room. What I wish to emphasize in this connection is the need for investigating these differences under conditions peculiar to our country. In the matter of aptitudes, interests and personality make-up, as well as in respect of sex, age and environment, psychological investigation is bound to yield results peculiar to our country, and it is to these characteristically Indian studies that our research workers must give immediate attention.

There is one field of Indian Psychological Research to which little or no attention has been paid, and that is the exploration of the emotional life of Indian children, both at the conscious and unconscious levels. The emotional climate of different countries have, no doubt, certain broad similarities. Fear, love, hate and aggression have a certain family likeness all over the world. But there are significant local differences due to differences in cultural background, tradition and family structure that have to be studied if we are to succeed in educating the youth of our country along right lines. And above all research workers have to give their time and attention immediately to the study of the unconscious of our

children. There are peculiarities of structure and function of the unconscious due to our traditions, family life and racial history. These have to be unearthed. I need not say how many of our educational and social problems can be solved if we secure some knowledge of the unconscious of the younger generation.

These then are the problems relating to the psychology of the young learner. I have listed only a few; there are many more awaiting attention. By way of a sample I may mention the problems of supernormality, subnormality and delinquency with special reference to Indian conditions. These have to be investigated in their Indian setting by advanced research workers in education.

The problems under the three other headings that I have mentioned have also marked Indian characteristics which have to be studied by the research worker. The school environment, the infiltration of our peculiar social stratification into this environment, the elements of competition and aggression, of anxiety and frustration, and of fear and inferiority, and the factor of suggestion in the school have distinctive Indian overtones that have yet to be understood. Other problems will readily suggest themselves to the well-informed research worker. I shall mention just two of these by way of illustrating the extensive field which remains to be explored.

Let me touch first on the vast and significant but as yet completely unexplored region of the psychology of the Curriculum. The psychological and psycho-analytic foundations of our curricula have not been studied by research workers. The existence of a psycho-analytic problem in this field has not even been suspected by many scholars. Consider for instance the role of science in our curriculum. What part does it play in developing the total personality of the learner ? Does it make for the harmonious development of the personality of boys and girls ? Which of the deep-lying urges and drives does it touch ? Does science help in resolving the complexes hidden in the unconscious or does it only tend to add to them and create frustration in the minds of children ? What is the nature of the impact of science on the deep unconscious or racial unconscious of the child ? These are a few of the problems

which have been cropping up in the course of a very small investigation that I have undertaken in my Department. These problems seem to have been ignored in the usual type of curriculum studies attempted by research workers.

Not only in respect of science, but in respect of every subject included in the curriculum, even in respect of such subjects as drawing, modelling, and hand-work, there is urgent need for probing into the psychological and psycho-analytic foundations. The Council of Teacher Education that we are planning for will have rendered yeoman service to the cause of Indian education if it will but solve just this one problem of the Psychology of the Curriculum.

I should like to mention one other problem, and that is the psychology of the teacher. There is a peculiar Indian tradition of 'Teacherhood' handed down to us from ancient times by those remarkably gifted teachers, the Upanishadic Gurus. Now, what is the secret of success of these spiritual giants? What was the nature of their mental make-up which made them peculiarly fitted for the teaching profession? How did they manage to transform or transmute their unconscious so that it neither affected them adversely, nor infected the minds of their pupils? Can we make a successful job-analysis of the ancient teaching profession? And can we, with the aid of that analysis, construct a Teaching Aptitude Test for selecting candidates for admission to our Training Colleges? These are challenging questions which must be taken up at once by research workers in the field of Educational Psychology.

(d) *The Technological Problems*: Having marked the highlights in the field of Educational Psychology, I pass on to the last group of problems which I designate the Technological Group comprising the administrative, organisational and methodological problems in education. Some amount of research has been done in this field. The cost of administration, the function of inspection, the causes of wastage, the optimum size of the class and others of a similar nature have been studied in a way. I should like these studies to be re-opened and re-done along strictly scientific lines in the changed environment in free India. And I may mention in

passing that new problems are appearing in our horizon. The multilateral school which is being sought to be established in certain States is bound to create quite a plentiful crop of problems for the research worker, and so is the question of bi-lingualism in the new set-up. And even the perennial problem of examinations is going to take on a new colouring in the changed atmosphere of our country. These and other questions of a similar nature have to be viewed in their proper Indian perspective for purposes of educational research.

Let me now sum up by mentioning the order of priority that I should like to assign to research problems in Indian Education. First, the Philosophical with the Sociological problem closely following on its heels, then the Psychological and finally the Technological group of problems : such is the order that I wish to prescribe for our research workers. In a sense it is true that all the groups are of equal importance and that attempts should be made to solve all of them simultaneously. But if we are to have a hierarchical grading among them, then the order suggested is the best and most suited to our conditions at the present moment.

II

The Research Worker in Education

From a survey of the problems let us turn to the worker who has to handle these problems. We should constantly keep before our mind the fact that the field we are to investigate is a social field. We should therefore take full advantage of the newly forged weapons of sociological research. The research worker in Education should familiarise himself with the latest developments in Sociometry and Experimental Sociology. Educational research is peculiar and exacting in the sense that it demands of its votaries qualities which make for success in the humanities as well as in the positive sciences. The ability for synthetic creative thinking and the ability for handling objective data by rigorous quantitative methods are both required in the field of Educational Research. And in addition the research worker in our field should have thorough

mastery over statistics. I am convinced that our serious shortcomings as Psychologists in this country are mainly due to the absence of a well-organised Indian School of Statistical Studies. I should therefore prescribe a course of thorough training in Statistics for all research workers in Education. Besides, I should insist on every aspirant for the status of a researcher in education acquiring a grasp of the findings of Contemporary Schools of Psychology and of their Educational bearings. In particular, the potential research worker should be completely at home in modern Depth Psychology. Without an understanding of the forces operating at the unconscious of the Learner in the Learning Situation, it will be vain to expect any significant results from research in education.

III

One word more about the organisation needed for developing Educational Research in our country, and I am done. We need at once an all-India body for co-ordinating and guiding Educational Research in our country. An all-India Council for Educational Research with a Central Research Bureau attached to it should be brought into existence immediately. The aims of the Council should be similar to those of the Committee for Research which was constituted by the British Psychological Society a few decades ago. Our Council for Research should formulate problems in order of priority, advise individuals and institutions about their research programmes and put them in touch with experts in the field concerned, collect and disseminate results of research, prepare and publish summaries of current research studies, maintain files of research journals, bulletins, reports, etc., organise a central reference library, provide statistical and mechanical aids to calculation, provide expert statistical assistance where needed, and also maintain a record of failures in research as a warning to research workers in education. If we are to achieve any significant results in Educational Research we should bring into existence an All-India Council of Research with branches in every State in our country. Let us hasten to bring such a body into existence.

In conclusion, I wish to say once again that it augurs well for the future that we who are entrusted with the sacred task of training the teachers of the youth of our country are meeting for the first time in conference in the history of Indian Education. We are discussing problems which perhaps no conference of educationists in the past was called upon to consider. It is but in the fitness of things that in a free country planning for national education, the Heads of Teacher Training Colleges should meet to review the achievements of their institutions and plan for the future. Let us by the results of our deliberations give a correct lead to those anxiously seeking for guidance in their efforts to plan for Indian National Education. Posterity will then have reason to be thankful to the organisers of the First Conference of Training Colleges in India.

THE M. Ed. COURSES IN INDIA

By

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In two brief and not-very-helpful paragraphs, the Indian Universities Commission under the chairmanship of Dr. Radhakrishnan has dismissed the subject of the Master's Degree in Education. "Little can be said," says the Commission, "about the work of M.Ed. candidates except that it is a good thing for every University training department to have this task of guiding beginners in the technique of educational research even if the results are necessarily small and scrappy."

We who are directly interested in teachers and in their training attach very great importance to the M.Ed. course. The standard of education in India is so low, the degree of efficiency of teachers is, generally speaking, so unsatisfactory, the time allotted to the training of a teacher is so meagre, education in India is fraught with problems so many and varied, that we attach importance to anything, such as the M.Ed. course, which may help to reduce defects and solve problems. The B.T. course is of a brief duration of nine months with many intervening holidays and it is impossible during this brief period to do justice to the highly developed and complicated art and science of education. We, accordingly, welcome the extension of the course of study for at least a few selected M.Ed. candidates. The M.Ed. candidates can also tackle the various problems that face Indian education and by their research contribute towards the development of education in India.

On page 136 of the bulletin on Item No. 5 (*a*) of the agenda issued by the organisers of this Conference, certain general points for discussion have been raised. I give below my considered opinion on these points. Opinions, of course, will differ, and the opinions expressed by me cannot be regarded as final, but perhaps they can form a useful basis for discussion.

Certain Broad Principles of Policy

1. *Admission* : The examination for the degree of M.Ed. should be open to a candidate who has after graduation passed the B.T., B.Ed., L.T. or an equivalent examination held by the Provincial government or by any recognised University of India—in first or second division—both in Theory and Practice of Education.

There should be no prescribed period after passing the B.T. or equivalent examination for admission to the M.Ed. course. A student can proceed to the course immediately after the B.T. or its equivalent examination.

2. *Duration of the Course* : (a) Duration of the M.Ed. course (partly by papers and partly by thesis) should be one full calendar year for those students who do the course on full-time basis. A full-time student is one who attends the college for not less than 4 hours per working day for the purposes of lectures, tutorials, practical and library work and who is not ordinarily employed.

(b) Duration of the Course should be two years : —

(i) in case of students who are employed and therefore do the course (partly by papers and partly by thesis) on a part-time basis. It is obvious that these students do not get adequate time to do justice to the course in one year. These students should attend the lectures and other work at a recognised institute during the time specified by the institute ;

(ii) in case of students who are not able to attend a regular course of lectures at an institute and who take up the course entirely by research under the guidance of a recognised University teacher.

3. *Types of Courses* The M.Ed. examination should consist of : —

(i) Partly by papers and partly by thesis, [advantage The candidate can be made conversant both with the broad principles and practice of education and current educational thought (by papers) ; and with the technique of educational research (by thesis)].

(ii) Entirely by thesis. (Advantage: The candidate can work out an educational problem exhaustively and intensively and is introduced to the technique of educational research and to the way of doing independent research work.)

The M.Ed. examination should not be entirely by papers.

One obvious modification that can be suggested in the existing courses is that '*Viva Voce*' should be taken on:

(*a*) Practical work;

(*b*) theme of dissertation or thesis; and

(*c*) current educational thought.

This practice is in vogue in some Universities at present.

4. *Aims of M.Ed. Courses*: The M.Ed. course should aim at:

(*a*) training in research technique;

(*b*) creating personnel for the staff of training colleges, higher posts in education departments, etc.;

(*c*) popularising the study of educational problems; and

(*d*) creating experts for specialised branches of education.

In the light of the above aims the following changes are suggested.

COMPULSORY

Paper No. 1: The advanced psychology of education and educational Sociology (including a prescribed course of Practical work).

Paper No. 2: Philosophy of education.

Paper No. 3: Development of education in modern India and comparative education in India, U.K., U.S.A., and U.S.S.R.

OPTIONAL

Paper No. 4 (*a*) Experimental education, or

(*b*) Administration of education and Inspection of Schools, or

(*c*) Methodology of Teaching.

In addition to the above four papers (of three hours each) a dissertation on an educational topic, practical work in experimental psychology and *Viva Voce* should be an obligatory part of the examination.

Each paper should carry 100 marks. The dissertation, practical work and *Viva Voce* should carry 200 marks (i.e. 1/3rd of the total number of marks).

The minimum marks for passing should be 30 per cent in each paper, 40 per cent in dissertation, and 40 per cent in aggregate to pass the whole examination.

5. *Dissertation* :

(*a*) Dissertation should be made obligatory for all M.Ed. students who take the examination partly by papers and partly by thesis.

(*b*) Dissertation should have bearing on any aspect of education embodying either :

(i) the record of the original investigation, or
(ii) a critical analysis of the existing data, or
(iii) a combination of both.

(*c*) Dissertation should be accompanied by a Certificate signed by a recognised post-graduate teacher stating that the dissertation is worthy of examination.

6. *Types of M.Ed. Courses* (*vide* item No. 4)

(*a*) M.Ed. (Experimental Education)
Compulsory Papers : 1, 2, 3.
Optional Paper : 4 (*a*).

(*b*) M.Ed. (Administration of Education):
Compulsory Papers : 1, 2, 3.
Optional Paper : 4 (*b*).

(*c*) M.Ed. (Teaching)
Compulsory Papers : 1, 2, 3.
Optional Paper : 4 (*c*).

7. *Co-ordination of M.Ed. Courses* : An attempt may be made to co-ordinate the M.Ed. courses at different Universities with a view to obtaining best results with minimum expenditure on the principle that a University may introduce one or

more typical M.Ed. courses for specialisation as suggested in item No. 6.

8. *Teaching*: Teaching should not form a part of the M.Ed. course and should have its natural end at the B.T. level.

There is widespread dissatisfaction with the scholarship and standard of work of those who have passed the B.T. and also of those who have passed the M.Ed. This is not surprising since each course is done in a single academic session. In my opinion it is imperative to find more time for the training of a teacher and for research in education, and the problem is to find this additional time without extending the total period of study of candidates who wish to devote their lives to the teaching profession. I would like this conference to take up seriously the following proposal of mine.

Teaching is as difficult a profession as medicine or engineering. The teacher in order to be efficient is in need of certain knowledge, certain experiences of school and the class-room, certain habits of mind and body, a certain outlook on life and a certain character, all of which cannot possibly be attained in the course of a year. I propose that Institutes of Education be established, to begin with at least one, to which matriculates may be admitted for a course of studies for four years leading to a Bachelor's degree in Education. Selected students who have completed this study may be allowed to proceed to the M.Ed. examination after an additional course of study and research for a period of two years. At present, a candidate spends four years in an Arts or Science College to take his first degree before coming for the B.T. course. The syllabuses followed by the candidates are not entirely suitable for the profession of teaching in secondary schools. If these four years could be spent in an institution which prepares candidates specifically for the teaching profession, the syllabus could be so drawn up as to be of the utmost value and advantage to the teaching profession. I am convinced that if this proposal is accepted by Governments and Universities, we would be producing a type of teacher far more capable and efficient than we are doing under the present arrangements. The candidates for the M.Ed. degree also would turn out valuable research work.

NEW COURSES IN TEACHER EDUCATION

By

Shrimati MADHURI R. SHAH, B.A., M.ED.,

Registrar, Indian Institute of Education, Bombay.

One aspect of the inadequacy of our organisation for teacher-training is that we do not provide for *all* types of courses needed to train the personnel needed for education. The defect is so obvious that hardly any proof is needed in its support. I shall, however, give a few examples to show the *nature* of the inadequacy whose *existence* is beyond dispute.

(1) *Vacation courses*: There are a common feature of American, English or European Universities; but they are so conspicuous in India by their absence. Calcutta is the only University which makes some provision for them; the Education Departments do nothing; and although a few non-official organisations try to do something, their attempts are like a drop in the ocean and they are neither continuous nor properly co-ordinated.

(2) *Teachers of technical subjects*: Beyond the traditional subjects included in the curriculum (such as history, science or languages), we provide special training in physical education and Drawing. The provision is generally inadequate and the quality of the work turned out is often poor; but at least the *necessity* of training is recognised. Even this has not been done in the case of those technical subjects which, under recent reorganisation schemes, are finding their way in the curriculum of secondary schools. We believe that it is not enough if a teacher of history *knows* history; and we, therefore, train him in the *teaching* of history. But our teacher of agriculture, for instance, is held to become a perfect teacher if he *knows* agriculture. Is this assumption really correct? Should we not devote our thought to the problem and make some provision for the training of the teachers of technical subjects?

(3) *Training of College Staff*: Historically, the need of training primary teachers was accepted first. Whether a

secondary teacher does or does not need any training was a matter of dispute for a long time ; but the necessity is now generally accepted. But whether a university teacher does or does not need any training is still a matter for controversy. We work on the assumption that if a person obtains a second or a first class degree (which is merely a test of his knowledge and *not* of his capacity to impart it to others), he is definitely able to teach the subject to college classes. This assumption is hardly justified and every one of us knows 'Professors' who would really be so much better off if they could somehow be made to spend at least six months in a training course. I believe that the superstition that a university teacher needs no training has outlived its utility and we must start training courses for college Professors as well. I am glad that the Mysore University is already thinking about the problem. I trust that our friend, Shri Deve Gowda would enlighten us on the point.

(4) *Training of Administrators and supervisors* : We have no special courses for the administrators of education or for inspecting officers. We seem to believe that the B.T. course (or at the most, the M.Ed. course) trains a person for any or every post in education. Such a basis is entirely wrong. The administrators of education or the inspecting officers must be teachers in the first instance and must be B.Ts ; but they must also be something more and we shall have to organise special degree or diploma courses for them.

(5) *Specialists* : A proper system of education also needs specialists for educational or vocational guidance ; teachers of backward or physically handicapped children ; psychoanalysts ; school psychologists, research workers in various branches ; statisticians, etc., special new courses are needed for training most of this personnel.

I do not claim that this is an exhaustive list. But it is, I believe, enough to show that we need to plan several new courses.

I do not think that we shall be able, in the short time at our disposal, even to make a full inventory of the new courses needed. It is next to impossible to draw up detailed syllabuses

and to work out their administrative or financial implications. I, therefore, feel that the delegates should now offer all their suggestions regarding the new courses ; and that the Conference should appoint a Committee to go into the matter exhaustively and to submit a report to the President who should be authorised to publish it.

PUBLICATION OF EDUCATIONAL LITERATURE

By

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Even a casual study of the literature available in English on the problems of Indian education will show its *paucity*. This must have occurred to all of you. This is due to three causes :

(*a*) Paucity of good writers ;

(*b*) Paucity of publishers who will devote sufficient time and money to the problem. As educational books do not 'pay', the publishers are ordinarily reluctant to publish them ; and

(*c*) Paucity of a reading public which will read with interest and buy such books.

These causes are interdependent, and as Shri Varma has just suggested, an attack will have to be made on all these fronts if success is to be attained. Of course, the most important cause of this paucity is the absence of a reading public. But its creation is rather a long-range programme. Our schools and colleges will have to build up reading habits in their children to such an extent as to be carried over in adult life ; the training colleges will have to create, in the teachers, an interest in their profession and their conditions of service must be such as to enable them to read at leisure and buy books ; and a larger and larger proportion of the thinking public would have to be interested in the study of educational problems. Such a development naturally requires much time and a good deal of exertion on the part of all educational agencies.

But we are obviously working in a vicious circle here. It is true that the absence of writers and publishers is due, under the law of supply and demand, to the absence of a reading public. But is it not equally true that if we can produce good

books, it will help materially in creating an interested and wide reading public ? It is this front of the attack on the problem about which I wish to speak today, with special reference to what the training colleges can do.

The first suggestion that I put forward is this : *We should plan and co-ordinate our efforts to produce some of the literature we need.* Let me illustrate. If a thorough and encyclopaedia history of education in India during the British Period is to be written, we shall need.

(1) histories of education according to areas, i.e. Bombay, Baroda, U.P., M.P., Madras, etc. and,

(2) histories of education according to topics such as university education, secondary education, primary education, etc.

It is only when all such studies are published that a complete history of education in India can be written. We should, therefore, concentrate on the production of these books as a first stage.

The Indian Institute of Education has taken up the task of writing a history of education in the State of Bombay (1800-1947). Shri R. V. Parulekar, our Director and veteran educationist, is doing it. The M.S. University of Baroda is preparing a history of education in the erstwhile State of Baroda. Now, can this idea be followed up elsewhere ? Would a training college in each State take up the problem and publish, say within two years, the history of education in that State ? That work is not difficult for each College. But if we plan our steps wisely, we shall have reliable documents for history in the course of 3 or 4 years and a great task would have been achieved.

I do not think that I need illustrate the point further. The idea is obviously one which can be easily extended to several branches of study. I would be grateful for your comments on the subject.

My second suggestion is this : *Each University should start a series of publications on education.* The paucity of publishers can be made up in this way. Moreover, several books which

are essential for educational reconstruction but which do not become a 'commercial' proposition can be published in this way.

Specialisation and co-ordination is possible here also. Different aspects of education can be selected by different universities and their series may try to specialise in those aspects; and we may co-ordinate this selection in such a way that duplication is avoided and all aspects of education are covered.

Another useful suggestion is that the task of preparing books in Indian languages—which is very urgent and very much neglected—can also be divided between us in a similar manner and we may have a particular university or training college devoting itself to the production of books in any one language.

If such a plan is to be worked out, there are two main difficulties—lack of funds, and apathy. Surely we can have no patience with the second; and the first is not insuperable enough to enable us to make a beginning, however small.

My third suggestion is this: *Let us develop a central bureau for publishing psychological tests on a non-profit basis.* You are aware of the dangers of giving this work to professional publishers. The Psychological Association of America publishes all tests on a non-profit basis and supplies them direct to schools and colleges *without* the intervention of booksellers. This makes the work efficient and cheap. We should, therefore, build up a central organisation to publish psychological tests and to supply them to educational institutions on a non-profit basis. What does the Conference think of this proposal ?

PSYCHOLOGICAL TESTS

By

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The Need : Today, in independent India, we are faced with the task of educating millions of children and youth in order to make them worthy citizens of a sovereign democratic republic. It is our duty to educate them so that they would not only guard the political independence gained but spread democracy to the social and economic aspects of life. Realising the magnitude of the practical problems confronting India the University Education Commission referring to the effort needed for original work in education and *the construction of tests of capacity and temperament* declared, " No task in front of India seems to us more urgent than this ".

There are two important facts to remember about Indian children. First, according to the Report by the Central Advisory Board of Education on Post-War Educational Development in India there are approximately 6 crores (6,00,00,000) children in the 5—14 age group. Second, no two of these 6,00,00,000 children are identical.

Every child is different from every other child in many different ways and characteristics. In any group of children in the same age and class, there is and will be differences in regard to interests, energy, physical fitness, posture, material capacity and achievement in skills. That individual differences exist has long been recognised but little is being done to find out the differences. In order to meet the needs of these varying personalities, the content and method of the educational programme must be adapted to each individual.

One of the main weaknesses of most programmes of education is that the curriculum is carried out with a hope that the pupils will be benefited ; but no planned effort is made to teach activities that have been chosen in terms of the needs of the individual pupils. A general type of prescription in the form of a curriculum is only a hit-or-miss technique. Successful

teaching requires the measurement of the individual differences of the pupils and the teaching of activities suited to their needs.

Formal education in our schools has never really come to grips with the task of meeting the needs of developing personalities. More or less on the basis of academic traditions school curricula have been organised to provide children with the opportunity for learning essential school subjects, and the facts included in certain mental disciplines. The methods of presenting the material to be learnt usually have been based on the logic of the subject rather than on the logic of child experience. So long as institutions of learning were considered as places for the dissemination of knowledge it did not matter much but when the fundamental aim of education has been changed from acquisition of knowledge to the development of personality and character it does make a big difference. This is especially true, now when the school aims not simply to give instruction in the three R's but aims also to help each pupil, as far as possible, to realise his potentialities as a person—to develop his mental abilities, his ability to master and enjoy arts, crafts, and various skills that are useful in everyday life, his ability to get along with others and to get along with himself.

Although it is obvious that people do differ markedly it is by no means easy to discover exactly what these differences are and how large or small they are.

Psychological Tests: A *psychological test* is a carefully planned situation in which the individual's characteristics can be described by a numerical value or score. For example, in a test of reasoning ability, the subject is given certain problems to solve. His performance is scored according to the time required to solve the problems or according to the number of problems solved in a given length of time.

Ways of Measuring Individual Differences: To find basic psychological characteristics we must first measure each of their components or traits. It is commonly accepted that there are six fundamental methods of measuring individual differences :

I. Tests,
II. Rating scales,
III. Interviews,
IV. Self-inventories,
V. Behaviour sampling, and
VI. Projective techniques.

Each type has its advantages and disadvantages and later each will be discussed in turn. Let us now look at some of the characteristics of all good measurements.

Characteristics of Good Measuring Instruments : To be of value, a measuring instrument must have validity, reliability and usability.

Validity The validity of a measuring instrument is the extent to which it actually measures what it is intended to measure. In other words, it should be able to measure what it seeks to measure. A valid test measures truly and accurately the ability or quality one wants to measure.

In measuring physical things, people are rarely in doubt as to the validity of the measuring devices they employ. For example, none would attempt to measure length with a thermometer. In measuring psychological characteristics, however, suitable measuring devices are more difficult to find. Thus the true index of validity is the extent to which the instrument accomplishes the purpose for which it was intended.

Reliability : The reliability of a measuring instrument is the degree to which people earn the same relative rank at any subsequent tests. In other words, it means continuing to test something with the same result each time.

Economy and Usability : Tests that measure important objectives of education with high validity and reliability may not be quite useful because of high cost or inability to be administered within the time available. The print should be clear and of appropriate size for the group. Directions to the pupils should be clear and concise. Further, the tests should be easily scorable.

Objectivity One of the most common causes of error in a psychological measurement or in a test of school achievement is the inclusion of items which must be scored on the basis of subjective judgment. If a test is to be reliable, the items must be set up in such a way that two or more persons can score it and get the same result.

Physical characteristics like height and weight can be measured accurately and objectively without being influenced by the bias of the person using them but when we are ourselves the measuring stick, such an accurate objective measurement is seldom obtained.

Kinds of Measuring Instruments

I. *Tests* : Tests may be classified under various heads : We can talk of standardised tests and informal (non-standardised, teacher-made) tests. A *standardised test* is one that has been given to enough individuals to produce fairly reliable, average grade, scores, which then represent normal performances. They may be sub-divided into (i) *Achievement Tests,* and (ii) *Diagnostic Tests.*

Achievement Tests : The most widely used type of achievement test is designed primarily to measure the status or attainment in a school subject or activity of an individual or class or a larger group. Achievement tests in the school subjects are more numerous and more widely used than any other kind. In the early period of the testing movement, a single test was often offered as a measure for " general ability " in reading arithmetic. It is now recognised, however, that several abilities or specialised phases of ability appear in the educational objectives of most subjects. It is therefore necessary to test each ability separately in order to make possible valid educational guidance. The typical presentday policy is to use a " battery " of tests to secure a rough survey of attainments *in the various school* subjects and to follow such an appraisal with a more extensive diagnosis of those subjects or pupils who seem to merit more thorough study.

Diagnostic Tests Diagnostic tests consist typically of a series of instruments designed to measure a larger number of

abilities, interests, and performances, often including special techniques, skills, and forms of information essential to success in the subject as a whole. Thus in silent reading, in addition to measuring level of comprehension and speed and accuracy of reading paragraphs of one or more types, tests may be included to measure recognition of isolated words, recognition of phrases, range of word-knowledge, skill in phonetic and visual analysis of word-forms, recognition of word-form elements, such as isolated phonograms, syllables, individual letters, and letter sounds. There is, however, no clear line of division between achievement and diagnostic tests. Some achievement tests are diagnostic to some extent. For example, to measure speed of reading easy passages and the most complex level of comprehension is to diagnose reading to some extent. On the other hand, diagnostic tests usually measure achievement in each of the abilities examined. What one finds is a range from very limited to very extensive diagnosis. Important diagnostic insight moreover, can be obtained by studying the responses to individual items on almost all tests.

The General Achievement Battery of Tests : The " Modern School Achievement Test " is an example of a survey test. It includes tests for each of the following :

1. Reading : level of comprehension ;
2. Reading : speed ;
3. Reading : accuracy ;
4. Arithmetic : computation ;
5. Arithmetic : reasoning ;
6. Spelling ;
7. Health knowledge ;
8. Language usage ;
9. History and civics ;
10. Geography ;
11. Elementary Science.

In making the tests, specialists in the various subjects endeavour to select as test items the most important of the commonly taught items of subject-matter. The test directions are

carefully standardised and given to a representative sampling of pupils throughout a country, to secure reliable norms. The raw scores may be converted into age or grade scores, and the relative ability of a pupil on the various tests may be intelligently compared. Thus, by giving the battery, an appraisal of general achievement in the basal subjects is secured. The test provides a " profile " sheet on which the pupil's attainments may be graphically displayed.

Merits and Defects of Standardised Tests: Standardised tests have certain obvious merits—convenience, ease in scoring, the provision of the " norms " for use in interpreting results, the possibility of comparing individuals and groups with each other, the value of knowing the reliability of the score, the high validity which may be secured by thorough study of the test before publication, and the values of enjoying the results of the experiences of other persons who have used the same test. The criticism that standardised tests too often measure trivial details or facts is a criticism of test-makers rather than of tests. New ventures have shown the applicability of the standardised test technique to a wide range of educational outcomes. Standardised tests, however, cannot be secured to measure every aspect of every teacher's programme. It is, therefore, necessary for a teacher to supplement the published standardised test with instruments designed to appraise abilities not measured by them at present and to meet local and special needs in the same fields now covered by them only in a general way. One of the methods of fulfilling this purpose is to construct " informal " or " teacher-made " tests similar in design to the standardised instruments.

Teacher-made Objective Tests The teacher can embody the content in which he wishes to examine his pupils in practically all the types of tests employed in standardised instruments. Commonly used forms such as the true-false or yes-no tests, the multiple-choice test, the matching test, the single-word answer are generally used. Research by specialists has made available many particular rules to be followed to secure the best results from each of many types of tests in the construction of teacher-made as well as standardised tests. Indeed,

it should be realised that the construction of home-made tests should be guided by the same principles as the development of standardised tests and is subject to the same difficulties.

II. Rating Scales

There are certain traits or characteristics of the human being's mental make-up which cannot, as yet at least, be accurately measured by means of standardised tests such as those described above. In fact, such traits as friendliness, generosity, and physical attractiveness exist mainly in the minds of our associates. Obviously, the easiest way to measure such personality traits is to ask a person's acquaintances what they think about him. The rating scale is a device for grading individuals on such traits.

The merit of a rating scale, like that of all instruments, depends on the degree of validity and reliability it possesses. Reliability of a rating scale is usually determined by finding out how well two sets of judges, using the scale, agree on the traits of the same individuals. The validity of a rating scale depends upon how well the judges understand the definition of the trait to be appraised; for the validity of a rating scale, as of any test, is the extent to which it does the task it was designed to accomplish.

There are at least three fundamental kinds of rating techniques, to be used when characteristics cannot be accurately tested by objective measures. Each of these has its advantages and limitations, and each will be discussed in turn: (1) the method of paired comparisons, (2) the order-of-merit method, and (3) absolute rating scales.

(1) *The Method of Paired Comparisons* In the method of paired comparisons, the judge successively compares each individual with every other in the group of subjects to be rated. In each pair, he rates one as superior to the other in the trait under consideration. The subject who takes the largest number of " firsts " in the comparisons is the one who has the highest score.

(2) *Order-of-merit Method*: The order-of-merit method consists in lining up the subjects in a 1, 2, 3.... order by picking out the best and then the next best and so on until all the cases have been ranked for the trait under consideration. The objection to this method is the difficulty of considering the whole field and keeping each individual in mind until the best single one is picked out. This method, like the method of paired comparisons, gives relative positions and not absolute ratings.

(3) *Absolute rating scales* In absolute rating scales, the judge assigns an absolute value to the trait being rated. With scales of this sort, only one judgment is made for each case involved. Consequently, this method is much speedier than the two preceding ones. It is subject to error in that the standards of the judge might fluctuate during the series. Also, there is a " personal equation " for each judge—that is, some judges assign too many high marks; others give too many low ones.

III. Interviews

The two forms of the Interviews: Interviews may be standardised or informal. In the highly standardised interview, predetermined questions are asked in a certain set order. This type of interview is probably not very much better than having the literate subject write his answers directly on the interviewer. At the other extreme, the interview can be so informal that it appears to be a casual conversation. Each of these methods has its advantages and limitations, its uses and abuses.

The Standardised Interview: The standardised interview is to be employed when the interviewers have little training and cannot be relied upon to avoid the common sources of inaccuracy and error in the interview. The outstanding advantage of this form of interview is that no time is wasted—every word counts. There is little likelihood of the interviewer's being side-tracked and failing to cover all the significant points.

One disadvantage of the completely standardised interview is that it has the same artificiality that the printed questionnaire possesses. With this type of approach the interviewee is not very likely to " open up " to the interviewer. Simple, routine facts of behaviour can, however, be obtained in this manner. Another disadvantage of the standardised interview is that the procedure cannot be varied to meet individual cases. The interviewer must adhere to his plan and get as much of the standard information as he can.

The Informal Interview The informal interview takes the form of a conversation. While the interviewer and the person interviewed talk about this and that, the interviewer is alert to guide the conversation into the desired channels. As the various bits of information are supplied, they are jotted down, but in an unostentatious fashion since the very act of writing down what the interviewee says makes the conversation artificial and stilted. The experienced interviewer is sometimes able to defer his notetaking until after the interview. The practice of taking the conversation down on a dictaphone concealed from the interviewee is an excellent—though expensive—way of combating the self-consciousness caused by the paper and pencil. Some of the advantages of the standardised interview can be retained without incurring most of the disadvantages if the interviewer prepares a formal list of the points to be covered and checks off each item as it is supplied by the interviewee.

How reliable is the Interview ? The reliability of the interview will depend upon who is doing the interviewing, what he is trying to find out, the degree of standardisation, and how much time he can spend.

One study was made of the ability of six experienced sales managers to interview prospective salesmen. Thirty-six applicants were interviewed by each of the six sales managers by any method that they cared to use, and were then arranged in rank order according to their estimated ability. The results showed an amazing lack of agreement among the interviewers as to the rank that should be assigned any particular candidate. One candidate, for instance, was rated as 3rd in ability by one manager and as 30th in ability by another (Scott).

Results of experiments of this sort would seem to indicate that the judgment made through personal interviews depends almost as much on who the interviewer is as upon the personality of the person being interviewed. A greater degree of reliability can be achieved by increasing the number of interviewers—that is, of course, if the applicant is not worn-out by being so frequently interviewed.

Interviewing often gives unreliable results when undertaken by unskilled personnel. However, in the proper hands and carefully worked out, the interview can be a very satisfactory means of diagnosing human personality.

IV. The Self-Inventory as a Means of Measuring Personality

To remove the disadvantages of rating scales and interviews, psychologists have developed standardised self-rating scales or personal inventories. The personal inventories differ from the measuring instruments already discussed in that they require the subject to give the needed information about himself. In the self-inventory, the subject is asked to answer questions concerning his subjective experience and personal life; he is asked to tell what he likes and dislikes, to indicate his admiration or contempt for various persons in public life, to explain what he does and does not do. Here is a sample (Strong):

"Part 1. Occupations. Indicate after each occupation listed below whether you would like that kind of work or not. Disregard considerations of salary, social standing, future advancement, etc. Consider only whether or not you would like to do what is involved in the occupation. You are not asked if you would take up the occupation permanently, but merely whether or not you would enjoy that kind of work, regardless of any necessary skills, abilities, or training which you may or may not possess.

Draw a circle around L if you like that kind of work.

Draw a circle around I if you are indifferent to that kind of work.

Draw a circle around D if you dislike that kind of work. Work rapidly. Your first impressions are desired here. Answer all the items. Many of the seemingly trivial and irrelevant items are very useful in diagnosing real attitude.

Actor (not move)	L	I	D
Advertiser	L	I	D
Architect	L	I	D
Army Officer	L	I	D"

Items in a self-inventory may be regarded as valid only after they have been checked against some outside measure of the trait they are intended to appraise. You can never be certain of the significance of a series of items or questions by merely looking at them.

You might guess, for example, that newspaper editors like playing poker and dislike playing tennis—but could you decide on the basis of common sense that life insurance salesmen dislike museums and like educational movies? These are typical reactions, based on responses of men in these professions to a self-inventory blank (Strong).

The first self-inventory was constructed during World War I (Woodworth). Obviously, one of the greatest problems in selecting soldiers and officers for training is to get emotionally stable men who will not break down under the emotional hazards of war. The Personal Data Sheet was devised to reveal the bad risks before their training started. Some typical items from a self-inventory of emotional stability follow (the words YES or NO in the parentheses following the questions indicate the answers that, if typically found, are characteristic of unwholesome emotional organisation):

Do you usually feel well and strong? (No)
Do you often feel that people are laughing at you? (Yes)
Can you stand the sight of blood? (No)
Do you have bad dreams at night? (Yes)
Have you ever walked in your sleep? (Yes)

A long series of questions like these is valuable in rating oneself with standards taken from groups of people. Some

individuals feel that they are emotionally abnormal when in reality they are fairly sound. In such cases they are relieved to know their true status. There is also the added advantage that honest answers to such questions can conveniently be studied by a trained psychologist, who can use them to diagnose and treat emotional or personality difficulty.

The self-inventory is convenient because it does not require assembling a group of raters or interviewers. It is especially valuable in that it gets below the surface to tap the individual's own personal experience and feelings. The self-inventory has the important disadvantage that a person does not altogether understand himself and hence cannot always give an accurate report.

V. Behaviour Sampling

The method of behaviour sampling does not depend upon what a person says about himself or upon what others say about him. Fundamentally, it is more likely to be valid than any of the measuring instruments so far discussed. This is because it deals with actual behaviour : the subject's typical behaviour in a familiar situation is carefully observed and evaluated. Instead of answering certain definite questions or solving particular problems, he is put in an ordinary situation, and a record is made of whatever happens. It is frequently possible to standardise the situation so carefully that many individuals can be compared at the same time under the same conditions.

The practical limitation *of the method of behaviour* sampling is that an elaborate set-up is required. Human adults lead complicated lives and there is consequently great difficulty in getting a behaviour situation which will be comparable for all kinds of persons.

A workable simplification and modification of the method of sampling behaviour makes use of a standardised questionnaire. The answers on this questionnaire, which can be objectively verified as true or false, reveal the elements of stability and responsibility in the person's pattern of living. There is no end to the number of life facts that can be collected

from the individual and later verified—facts concerning which the subject knows the answer. Typical examples are:

What is your civil status ? (single, married, separated, divorced, widowed)

Do you own life insurance ?

Do you have a banking account ?

Are you a registered voter ?

This type of information about a person's life is useful for prediction because people as a rule will continue to behave in the future in much the same way they have behaved in the past.

VI. Projective Techniques

In recent years, psychologists have been experimenting with certain methods of personality measurement called *projective or depth* techniques. This name has been given them because they are thought to bring out a deeper expression of the personality than that revealed by the more or less conventionalised verbalisations and performances tapped by the methods discussed above. Here is one especially clear definition of the projective methods

> "(A) projection method for (the) study of personality involves the presentation of a stimulus-situation designed or chosen because it will mean to the subject, not what the experimenter has arbitrarily decided it should mean (as in most psychological experiments using standardised stimuli in order to be 'objective'), but rather whatever it must mean to the personality who gives it, or imposes upon it, his private, idiosyncratic meaning and organisation." (Frank)

Numerous suitable materials for the projective study of personality are available. Of these, free association (word-association tests), ink blot interpretation (Rorschach tests), and picture interpretation (Thematic-Apperception Tests) have been most adequately studied to date.

Word-Association Tests : An early type of projective technique is the word-association test, which consists of having a

person listen to, or read, a series of stimulus words to each of which he responds as quickly as he can by giving the first word that comes into his mind. Analysis of such responses can reveal much about the emotional life and personality of the subject.

Rorschach Test: One of the oldest of the projective methods is the Rorschach technique, making use of a series of ink blots. The series includes several ink blots, some being coloured and all varying greatly in form, shading, and complexity. The subject observes the cards in order and describes what he " sees " in the blots. The test is thus a semi-controlled association test, where the stimuls materials has no objective meaning.

The test gives information about the personality structure which cannot be brought out by clinical interviews. For example, subjects react to the colour in the blots in a manner similar to their emotional response to their environments. When presented with a coloured blot, a well-adjusted, outgoing subject will probably respond to the colour in a well-controlled fashion. On the other hand, subjects who respond to their emotional environments in an explosive, uncontrolled way frequently give associations such as blood, or smoke and fire. But the content of the association is not the only variable to be considered. It is important to note whether the responses are determined by movement (as is true of introverts) or by colour (as is true of extroverts). The amount of detail is also important: rigid, obsessive personalities and brain-injured subjects for example, tend to see minute details.

One obvious limitation of the technique is that its reliability depends upon the skill of the administrator, who must be highly trained, for the scoring is complex and requires precise judgments. Separate scores are made of what the subject sees on the card, where he sees it, and what quality of the blot caused him to see it. The interpretation of a Rorschach recored is always based on many variables, never on one or two responses alone.

Thematic-Apperception Test: Another interesting projective technique is the Thematic-Apperception Test (Morgan and

Murray). The test consists of three series, each series containing ten photographs representing different situations. The subject is requested to make up a story around each picture, describing the situation, the events that led up to it, the probable outcome, and the feelings and thoughts of the characters. The clinical interpreter's objective is to discover the thought content of the subject through evaluating (1) the formal characteristics of the stories, and (2) the content of the stories (Rapaport).

In evaluating the formal characteristics of the stories, the interpreter may look for INTER-INDIVIDUAL CONSISTENCY and for INTRA-INDIVIDUAL CONSISTENCY. An example of the former is this : if a prostrate figure whose face is not shown in the picture is usually seen by men as a woman, and if a certain male subject sees the figure as a man, then his perception of the picture deviates from the perceptions of other men and so must be considered significant. And here is an example of intra-individual consistency : if a subject who has given a full background of events in nearly all his stories avoids so for one particular story, then this omission must be considered significant and the reason for the omission found.

Objectives : But what is the purpose of all these psychological tests ? Obviously to find out the individual. But is the individual to be found in order to label him as intelligent and bright and leave him uncared for or find him dull and neglect him ?

Any programme of psychological testing, in its broadest sense, should begin with a clear and detailed definition of the school's objectives. Hence before launching on a programme of testing, objectives should be defined. Generally speaking, the aim should be to assist in his efforts to discover and develop his best potentialities for his personal happiness and social usefulness.

Hence schools should attempt to help the pupils to find their abilities and interests and provide experience and opportunities for the development of physical vitality, social competence, personality adjustments, desirable attitudes and ideas, emotional balance, intellectual alertness, insights, facts, appreciations, techniques and skills such as those sought in the various

school subjects. Psychological measurements and their interpretation should attempt to measure the extent to which pupils have attained or are progressing toward the attainment of the objectives.

Clearly therefore psychological tests are not an end in themselves ; they are a means to an end, the end being the development of the personality of the children and youth entrusted to the care of the schools.

Conclusion : Therefore, the first requirement ot a good test is that it shall measure a genuine objective in education. Since time and facilities are limited the school should use tests to gauge its progress towards its most important rather than its least important objectives. Human behaviour being so very complicated there are not many paper and pencil tests which could clearly reveal the personality of children. But to the extent we understand through tests the behaviour of the children entrusted to our care and utilise that understanding to the development of their potentialities for their happiness and social usefulness to that extent we will be fulfilling our task of educating our children in New India.

SOME PROBLEMS OF TEACHER EDUCATION

By

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Retired Principal, S. T. College, Belgaum.

I am sorry that I cannot attend but my heart goes to your work in the proposed conference. Our country needs right type of teachers, the teachers who will shoulder the responsibility of Independent India. Our education has to regenerate our nation after taking due account of our past failings and weaknesses. We are, at present, just carrying on what was left by the British people. Though we call ourselves a free nation we have not made any changes in our educational system or in our education outlook. Neither our pupils nor our teachers have really understood and appreciated the importance and responsibility of freedom that our country has achieved. In my opinion the Training Colleges of Teachers must give proper lead to the System and Philosophy of Education in this country. Our moral standard and outlook on life must be changed and our educational system and our teachers can mould our future generation. The Conference that you are holding at Baroda should give a proper lead in shaping the future educational policy of our country especially with regard to our secondary education.

A word about our teachers' training in Bombay State. It is true that after graduation the B.T. course is of one academic year. But most of our teachers have to undergo training for one year in Physical Education at *Kandivli* and another *one year in Basic Training at Bordi, Ahmedabad or Dharwar.* This means a graduate who has to qualify himself as a full-fledged teacher, must spend *three years* in training at different training institutions. His period at one training institution is so short that no institution can make an impression on him. In my opinion I have noticed that one academic year at the B.T. College is too short to give him any real training. He joins the B.T. College late in life which means he has lost his habits

of studies and concentration. He takes some time to adjust himself to college life and when he feels that he is in the college his second term is over and he thinks of going out. There is no continuity and there are no traditions developed. It would be, therefore, better if he could be in one college at least for two years. Instead of making him spend three years in different training institutions it will be much better to combine all the courses and keep this teacher for training in one Training College where he can learn the art of teaching, physical education and Basic Education. Really all education is one. Basic Education and physical education are a part of general education and there is no need to separate them. If a little specialisation is required these subjects may be kept as optional subjects at the B.T. examination. As we have specialisation in different subjects at the B.A., we may have similar specialisation at the B.T. The B.T. course may be made of two years and the students may be expected to specialise in some such subjects—Physical Training, Basic Education or Basic craft, Administration of Education, Experimental Psychology, etc. at the B.T. Examination. This will give us what we want and at the same time we may get a teacher who is better professionally-minded due to his longer stay at a Professional College. We may reduce some theory portion at the B.T. examination and give more importance to practical training. This should be easier now because we have a Master's degree in education. If one wants to specialise in any part of educational theory he can do so at the M.Ed. examination. In short, our B.T. course should be more simple and more practical. A teacher after B.T. should go out well equipped to carry on his work in the class-room of a good secondary school.

TRAINING COLLEGE
MADRAS

THE FUTURE OF TEACHER TRAINING

By

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1. *Intellectual equipment of the average teacher*: Thirty-six students were picked up as a random sample from among those that were on roll in each of the two successive years of a Secondary Training College. The Higher Examination Form A (for High Schools and Colleges) of the Otis Self-Administering Tests of Mental Ability was applied to the two groups of students strictly in accordance with the instructions contained therein. The I.Q. of each student was then calculated as per formula given by Otis for different age-groups. The following are the I.Qs of the students of the two Groups (No specific order is adopted in arranging the I.Qs).

I.Qs of the First Group of 36 students :

107, 118, 88, 86, 104, 106, 106, 99, 93, 91, 100, 96, 86, 90, 90, 94, 91, 96, 107, 91, 96, 90, 100, 106, 98, 101, 100, 106, 97, 104, 95, 94, 84, 89, 103, 96.

I.Qs of the Second Group of 36 students :

98, 98, 93, 100, 101, 107, 84, 100, 95, 91, 96, 97, 94, 103, 92, 87, 112, 93, 96, 95, 102, 99, 92, 89, 103, 119, 97, 103, 114, 100, 90, 92, 83, 92, 101, 84.

It is sufficiently clear that the majority of the students in both the groups have their I.Qs between 90 and 109, thus forming only a mediocre lot. It is evident that the teaching profession has not attracted a better class of people. Reasons for this apathy to the teaching profession are many ; but the most important of them appears to be the economic one this profession being the saddest of all trades.

2. *Some suggestions for reform* : I would venture to make a few suggestions for effecting improvement in the structure and function of training colleges :

(1) Those choosing to become teachers should be encouraged to undergo training as soon as possible after their graduation. The longer the period they linger in school or elsewhere, the less the chance they should have of entry into the college.

(2) The subjects for specialisation should not be less than three. In addition, the teacher under training must have a thorough knowledge of all the allied subjects of the school curriculum inasmuch as he has no knowing what classes or subjects he may be called upon to teach on his return to school. This is the only time when he can seriously devote himself to this rather unpleasant but essential task in the interest of his pupils.

(3) Training Colleges are meant for secondary schools and as such they work concurrently with them provided the universities are persuaded to keep Training College terms in line with school terms. If two years' attendance is costly, this change alone may give sufficient time for better preparation of teachers under training.

(4) Wherever possible, Method Masters should be the subject teachers in the practising schools. Teachers under training will have enough opportunities to conduct the subject classes as and when recommended by the Method Master who is ultimately responsible both for the training of the teachers and for the completion of the syllabuses prescribed for the school students.

(5) Now that the course of training is not likely to be extended beyond a year, and that older people imbibe and absorb new principles of teaching rather with difficulty it is imperative that every three years at least, these people are brought back to training institutions for a month or so during which period all developments in the methods of teaching are brought to their active notice. Periodically, pre-planned Refresher Courses should be made compulsory for all teachers working in schools. It should, however, be made clear that at the end of the Refresher Course no kind of formal or other examination would be held.

Creation of a National Teacher-Training Service for India

By

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The object of this paper is to suggest a practicable plan to develop a National Teacher-Training Service in India.

2. *The defects of the existing situation* : I believe that you will all agree with me when I say that our President has briefly and correctly diagnosed the existing position whe she said that we have numerous training colleges but no National Teacher-Training Service. Our training institutions lose greatly in effect and utility because they are divided into water-tight compartments on the basis of the stage of education for which they prepare teachers, have evolved no co-ordinating agencies of their own, and are greatly isolated from the schools for whom they train teachers. How to remedy these defects is the main problem we have to face.

3. *Institutes of Education* : I am of the opinion that we may learn a valuable lesson here from the movement to establish Institutes of Education which started in England after the McNair Report and which is in full swing at present. An Institute of Education is established by a University under regulations framed by it. Each Institute is a recommendatory body to the Senate of the University which also has the power to alter its constitution or even to dissolve it.

On the Delegacy or the General Body of the Institute are represented all University Departments of education, all Training Colleges within the region served by the University, and all Local Education Authorities which employ the teachers trained by these colleges. In other words, the Institute brings together, in close contact, the training colleges, the teachers and the managements of schools within a given region.

The activities of such an Institute are varied :

(1) It carries on research in education especially on the problems which the schools bring to them, and helps in evolving solutions of common difficulties ;

(2) It co-ordinates the work of the different training institutions within its region ;

(3) It carries out projects in curricular reform ;

(4) It keeps the teachers in touch with new ideas through periodical contacts, refresher courses, visits, camps, discussions, publications, etc. ;

(5) It maintains and improves standards by recognition of teachers and control of examinations in teacher-training ; and

(6) It conducts a journal for the educational activities of the region.

It is the realisation of these advantages that made England take up the movement to organise such Institutes. Formerly the Institute of Education of the London University was the only one of its type. But soon after the McNair Report, the movement became general. The first Institute was established in Birmingham in 1947 and today every university with a Faculty of Education has one. The experience of the last three years has been very encouraging. It may be safely said that the movement has come to stay.

3. *The need of such Institutes in India* : As I study this movement, I realise that we must also organise such a movement in India with, of course, the necessary changes to suit our local conditions. The defects from which we now suffer can be readily cured by the adoption of such a plan.

What I suggest is this : the country may be mapped out into regions on the basis of (1) Universities or (2) languages. For instance, the State of Bombay may be divided into 4 regions (1) Bombay City, (2) the region of the Poona University (Marathi Area), (3) the region of the Karnatak University (Kannada area), and (4) the region of the Baroda University (Gujarati area). Here each region has only the University which has a faculty in Education. But this may not necessarily be so. In the State of Madras, for instance, the area of

the Madras University will have to be divided into (1) a Tamil region (2) a Malayalam region, and (3) a Kannada region. In some places, therefore, one University may have more than one linguistic region just as some linguistic regions will have more than one University. But the idea should generally be to mark out a homogeneous linguistic region with a University or a training college as a centre. There is no objection at all to form a region with more than one language (in some places, this will be inevitable) provided there is a training college at the centre and that college teaches through the principal languages of the region.

After the region is marked out, the next step is to establish an Institute of Education for the region on the English model. It should be created by the University to which the Training Colleges would be affiliated and should consist of—

(1) Some educationists nominated by the University. (These may not necessarily be from the same region);

(2) Representatives of Training Colleges Pre-Primary, Primary and Secondary in the region;

(3) Representatives of Secondary Schools in the region;

(4) Representatives of the School Boards in the region;

(5) Representatives of the Educational Research Institutes; and

(6) Representatives of the recognised Teachers' Associations (Primary and Secondary).

The powers and duties of these Institutes should generally be on the lines of the English Institutes.

I strongly feel that if institutes of Education are founded on these lines and worked on the way in which they are working at present in England, it would be a great step forward and we shall create an efficient teacher-training service in each region.

4. *An All-India Organisation*: After these institutes have been organised, it would be time to organise a Central Organisation on an all-India basis. This would consist of (1) representatives of regional Institutes, and (2) a few persons nomi-

nated by the Government of India. Its main functions would be to co-ordinate the work of the regional Institutes.

5. *Conclusion* : I have placed before you what I consider to be a practical proposal to evolve a National Organisation of Teacher-Training in India. I would request the Conference to give its earnest consideration to these proposals.

THE T.D. COURSE IN BOMBAY

By

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and
Shri S. K. UNUNE, B.A. (Hons.), B.T.

We propose that the T.D. course in Bombay should be made equivalent to the I.A. examination so that the candidates who have passed the T.D. examination may be admitted to the B.A. course. This would make the T.D. course more popular and useful.

The same practice should be adopted by all universities which run a course equivalent to the T.D.

We also strongly urge that the training of undergraduate teachers should be done exclusively by the universities.